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TESFAYE FENTAW NIGATU
UNDERSTANDING THE OLDEST-OLD: WHY THEY DO NOT TRAVEL

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Abstract

Those constituting the old proportion of our population in the United States who are 65 and over are expanding at a rapid rate. In particular, the number of oldest-old, those who are 85 or older, are actually increasing at a faster rate in comparison to young-olds (65-74) and old-olds (75-84). However, in the research community, an often-neglected segment of old-age is unfortunately the oldest-old. As leisure research continues revealing the tremendous impact leisure and tourism involvement has on one’s quality of life and its power to predict one’s life satisfaction, it is crucial for tourism professionals to identify travel-related barriers for individuals of advanced age so older individuals can sustain their leisure engagement. This study, by comparing the perceived travel constraints of the oldest-old with the young-old and old-old, identifies travel barriers specific to the oldest-old. The findings of this study will help tourism professionals to assist those belonging to this segment of the old population in negotiating their constraints, enabling them to continue enjoying leisure travel as they advance in age.

Keyword:
Oldest-Old, Old traveler, tourism, Travel barriers

Introduction

Those constituting the “old” proportion of our population in the United States who are 65 and over
are expanding at a rapid rate, especially as the Baby Boomers continue growing into retirement stage (Dunkle, Roberts, & Haug, 2001). However, an often-neglected segment of old-age in tourism studies are those constituting the oldest-old (aged 85 and over). The number of oldest-old is actually increasing at a faster rate than the young-old baby-boomers (65-74) or even the old-old (75-84). According to the UN Dept. of Economic and Social Affairs, by 2030, the oldest-old is expected to have increased by 151-percent on a global scale since 2005, compared to 104-percent for those 65 and older (UN Dept. of Economic and Social Affairs, 2005). According to the Federal Interagency Forum on Aging Related Statistics, by the year 2050, those 85 and over will constitute one in four older adults (Dellinger, 2012, p. 27) However, despite the tremendous growth that is taking place within the oldest-old population, many researchers in the leisure and tourism field have yet to recognize this population trend among the older adult community and continue viewing old-age as an umbrella term, lumping everyone over the age of 65 in to the same category (Lee, Chen, & Hewitt, 2011). Nevertheless, research is showing the older population is far from being a homogenous group. The oldest-old have specific travel needs differing from the young-old and old-old due to significant health decline (Gautret, Gaudart, Leder, & Schwartz et al, 2012), a lack of travel companions (McCluskey, Thurtell, Clemson, & Kendig, 2011) and higher frequencies of no longer holding a valid driver’s license (Dellinger, Sehgal, Sleet, & Barrett-Connor, 2001).

However, the question then arises: “Why should researchers zero in on the oldest-old so that even those 85 and over can still enjoy leisure travel?” In Nilsson, Bernspang, Fisher, Gustafson, et al. (2007)’s research on the correlation between both leisure and occupational engagement with life-satisfaction for
those over 85, they found that those with lower leisure participation had statistically lower life satisfaction than those with higher rates of leisure participation. Results also revealed that occupational engagement only explained 12-percent of the variance in life-satisfaction. Leisure was therefore a much stronger predictor of life satisfaction (Nilsson et al., 2007). Participation in leisure may even help older adults defy ageism and portray themselves in a more positive light both to themselves and others (Dionigi & Horton, 2012, p. 32). For example, older adults, including the oldest-old, who engage in competitive sports find that it increases their self-confidence, provides them with a social life, and allows them to defy the ageist stereotypes prominent in society (Dionigi, 2006). Research has shown that engaging in leisure, including tourism, improves quality of life (Neal, Sirgy, & Uysal, 2004). Further, as age increases, individuals may find they have more and more time for travel due to freedom from work and family roles (Kleiber & Genoe, 2012, p. 44). Therefore, there is clearly a need to study the oldest-old regarding their barriers to, and preferences for travel so they can sustain their healthy leisure lifestyles. Unfortunately, little research has been done in the tourism or gerontology fields about this segment’s travel-related issues. This study attempts to compare the oldest-old with the young-old and old-old in terms of potential barriers to travel, particularly health concerns. The ultimate goal of this research is to help tourism practitioners to identify and negotiate travel barriers encountered by the oldest-old, enabling them to continue enjoying travel as they grow into advance in age.

**Literature Review**

A number of research have revealed that it is common for those over 65 to encounter some barriers
that make their travel more difficult, particularly when they have a certain level of health complications (Blazey, 1992; Kazeminia, Chiappa & Jafari, 2013; Alon, Shitrit, & Chowers, 2010). Patterson (2006) found that travel is very common amongst early retirees; however, health issues become more of an issue as age continues to progress, which can make vacation time more complicated. In Nilsson & Fisher’s (2006) interviews with 156 older adults 85 or older regarding four dimensions of leisure: interest, performance, motivation, and well-being, nearly two-thirds of participants suffered from cardiac disease, most had battled or were battling musculoskeletal issues, and 55-percent suffered from two or more medical conditions. In Sato-Komato, Hoshino, Usui, & Katsura’s (2015) interviews with 15 older individuals ranging in age from 81 to 98, over half of participants suffered from some sort of cardiovascular disease and four others suffered from cancer, chronic pain, or a respiratory disorder. Obviously, in planning vacations and travel destinations or other leisure opportunities for oldest-old individuals, Their health conditions must be taken into consideration.

Previous research has shown that older adults tend to prefer less adventurous, low risk trips, and organized tours (Alon, Shitrit, & Chowers, (2010); Aro, Vartit, Schreck, Turtiainen, et al, (2009); Gautret, Gaudart, Leder, & Schwartz (2012)). However, this body of research did not give specific attention to the oldest-old, instead, older adults across a broad range of age were studied. In general, older people prefer trips requiring less exertion than the types of excursions younger people may enjoy. As old-age continues to progress, less exertion will become more of a priority due to a progressive decline in health. Professionals in the tourism or recreation field may need to consider the planning of organized tours, design some seated activities at destinations, and look for ways to make recreation less physically
exerting for oldest-old individuals who may suffer from chronic pain, cardiac, and/or respiratory issues as previous research has indicated as being common amongst this population (Sato-Komato, Hoshino, Usui, & Katsura, 2015).

Since the unfortunate truth is that health status tends to decline from the result of increased fragility and the emergence of chronic conditions as individuals grow into deep old age, traveling may be more difficult for the oldest-old due to increased spending on medications, assistive devices, and doctor’s bills. According to the American Association of Retired Persons (AARP) in 2002, during the year 1996, the average per capita health care expenditure was only $2,930 for those between the ages of 50 and 64 but a whopping $7,453 for those over the age of 85 (Coughlin, & D’ambrosio, 2012). Cohen-Mansfield, Shmotkin, Blumstein, & Shorek et al. (2013) conducted a longitudinal study by collecting three waves of data (1989-1992), (1993-1994), and (2000-2002), comparing participants between the ages of 75-84, 85-94, and 95 and over on demographics, health, function, and well-being. Matched cohort comparisons revealed that income declined as age progressed to 85 and over yet health service use, such as doctor and dental appointments, significantly increased. Declines in activities of daily living (ADL) and instrumental activities of daily living (IADL) functions, cognitive function, mobility, and functional health were all significant for the oldest-old. Over time, study participants reported increased comorbidity and decreased subjective health (Cohen-Mansfield et al., 2013).

Another barrier making it harder for older adults to enjoy travel is accessibility. Transportation complications related to physical mobility or whether or not individuals still own a car or hold a valid driver’s license are major constraints to travel for the oldest-old. In Davis, Fox, Hillsdon, &
Coulsdon, et al.’s (2011) study of rates of physical activity across a seven day period for 725 older adults 70 and older, they found that those men and women between the ages of 70 and 74 and high in physical function made five times as many weekly trips by automobile than those over 85 or low in physical function. Participants who did not use a walking or mobility aide made twice as many trips via automobile than those who use such aides (Davis et al, 2011). This suggests that taking vacations may be significantly more difficult for the oldest-old than for the young-old due to significant declines in driving frequency and impaired mobility as a result of deteriorating health. In Dellinger et al.’s, (2001) cross-sectional study evaluating what factors play a role in the decision to drive or no longer drive, the mean age of the 141 participants who had stopped driving within the last five years was 85.5. Most of those who had stopped driving within the last five years were women and the most common reason given for no longer driving were medical conditions such as vision, Parkinson’s, or age related problems such as slow reaction time (Dellinger et al, 2001). Since the oldest-old experience heightened rates of physical and cognitive decline compared to the young-old and old-old (Lucca et al 2015; Cohen-Mansfield, 2013), driving can become more complicated, or even dangerous for them, meaning that many oldest-old may need to find transportation alternatives or ride with a driver not affected by mental and/or physical conditions that could impact their ability to drive.

Interestingly, some research has found that the transportation patterns of some oldest-old is associated with their gender. Of particular interest is that in Dellinger et al.’s (2001) study of driving decisions, most of those individuals who ceased driving were women (65%) and the women participants were more likely to report than the men that someone else could drive them. In Adler and Rottunda’s
(2006) series of three case studies with four men and eight women ranging in age from 70 to 85, which examined factors involved in making the decision of whether or not to continue driving, the female participants drove an average of 47 years before giving up their license while the male participants drove an average of 69 years. One of the male participants expressed that giving up his license made him feel like he lost some of his masculinity and that it hurt his self-confidence. Participants expressed that it was harder for men to give up driving than it is for women (Adler & Rotunda, 2006). One man had macular degeneration for four years but persisted at driving until he actually failed the eye exam while a female participant said her husband refused to give up driving even after having multiple small strokes and experiencing slow reaction time (Adler & Rotunda, 2006).

In the survey conducted by Kostyniuk & Shope (2003), the results revealed that widowhood is also a major factor in transportation patterns of the oldest-old. Kostyniuk & Shope (2003) telephone surveyed 1,053 drivers and former drivers 65 and over to examine decision making regarding choices of transportation and transportation alternatives for those who have stopped, or will soon stop driving, finding that for drivers and former drivers alike, women were three to four times more likely to be passengers. For women who were still driving, their husbands were usually the drivers and those who no longer drive, who were twice as likely to be widowed then current drivers, were usually driven by their adult children (Kostyniuk & Shope, 2003). Being that women may be more likely to cease driving sooner than men (Adler & Rotunda, 2006) and some are more often passengers to their husbands than they are drivers (Kostyniuk & Shope, 2003), widowhood may have important implications for transportation. Widowed women may find it more difficult to travel if constrained by no longer having their husband
around to drive when going on trips. In Cohen-Mansfield, et al.’s (2013) longitudinal comparison of three age groups: 75-84, 85-94, and 95+, results showed that for those who survived the three waves of data collection (1989-1992), (1993-1994), (2000-2002), rates of non-married status (mostly widowhood), increased to 73-percent over time for those 85 and over. Those in the travel and tourism field must strive to find ways to make transportation accessible to oldest-old widowed women. One emerging idea in the tourism literature with great potential to alleviate the transportation burden for oldest-old men and women alike who are widowed and/or no longer drive is travel companionship.

A key barrier to leisure travel for the oldest-old is a lack of companionship. McCluskey, Thurtell, Clemson, & Kendig (2011) studied 96 older adults between the ages of 70 and 99, finding a major constraint reported by these participants is not having someone to go with. Baltes and Baltes (1990), using socio-emotional selectivity theory, postulated that as individuals progress through later adulthood, they tend to want to spend more time with family members or those whom they are already close with rather than spend time meeting new people, which suggests that for both widowed and non-widowed oldest-old, traveling in a group with close friends or family may allow for vacation taking to remain a reality. Being a part of a group with younger and/or more physically fit companions who still drive may help the oldest-old feel more secure and provide them with someone to watch out for them or be there in case of an emergency. In Alon, Shitrit, & Chowers (2010) comparison of physiologic constraints between travelers in their 20s and those between 60 and 82, they found that those between 60 and 82 prefer to go on trips that are pre-arranged and involve tour like activities, suggesting that they feel more comfortable with the company of other people. In Kazeminia et al.’s (2015) study of travel constraints given by those
between the ages of 50 and 64 in online travel discussions, one of the major discussion topics was how to find a travel partner. Multiple study participants said that traveling with grandchildren, children, significant others, or close relatives is particularly gratifying. Others suggested that traveling in groups is great for those who are physically disadvantaged or widowed, which are two circumstances that are very common in oldest-old age (Cohen-Mansfield, et al., 2013). Additionally, participants mentioned in their discussions that joining travel groups is a great way to develop friendships and gain emotional support (Kazeminia, et al., 2015).

In sum, previous research has unveiled complications related to health, transportation, lack of companionship, and/or widowhood in old age that pose as travel barriers. Of particular importance is that the oldest-old are at more of a travel disadvantage when compared to the young-old and old-old. Those 85 and over are significantly more likely to be widowed (Cohen-Mansfield, et al., 2013), meaning vacation travel can be more difficult or less enjoyable because of the loss of who may have been one’s most favored travel companion (Kazeminia, et al., 2015). Perhaps the potentially biggest constraint to travel for members of deep old age is declining health status. Multiple researchers have documented that as older people continue to progress through old age, health status will continue to drop (Patterson, 2006; Nilsson & Fisher, 2006; Sato-Komato, et al., 2015; D’Ambrosio, et al., 2012; Cohen-Mansfield, et al., 2013). As a result of worsening health, transportation is also a major constraint for the oldest-old because physical and/or mental health complications make it difficult to continue driving (Davis et. al, 2011; Dellinger et. al, 2001; Adler & Rotunda, 2006). Travel companionship may be a suitable alternative for oldest-old who no longer drive or widowed women who no longer have their husband to drive them.
Baltes & Baltes (1990) found in their research that as individuals grow older, they reap emotional rewards from spending time with close friends or family, which suggests that traveling with family or long-term friends may be particularly gratifying for the oldest-old.

While health decline, transportation difficulties, widowhood, and a lack of companionship may make vacationing more of a challenge for the oldest-old, it is critical researchers and the tourism industry collaborate to find ways to allow vacationing to remain a reality for even those of deep old age. Leisure participation is associated with higher quality of life even for those 85 and above (Nilsson et al., 2007; Neal, Sirgy, & Uysal, 2004) and can help the oldest-old defy ageist stereotypes and improve their self-esteem and quality of life (Dionigi, 2006).

**Method**

Data were collected during the years 2012-2015, mainly in the states of Ohio, Indiana and Michigan. College student volunteers were recruited to conduct in-person interviews. A questionnaire and an interview instrument were developed after conducting a systematic literature review, along with the administration of a focus group (N=5, age ranged from 64-78). The questionnaire includes four sections: Demographics, health status, leisure life style, and travel activities. The measuring constructs in the analysis include perceived health status, reason not to travel, taking a vacation in the past 12 months, encountering health problem on the trip, and demographic information. Among these variables, perceived health status and reason not to travel were operationalized with a five-point Likert scale, where 1 equals strongly disagree and 5 equals strongly agree, with higher scores indicating having more health problems or difficulties to travel. For example, the respondents were asked to indicate their agreement to these
questions: “In general, you feel good about your health status;” “you don’t take a vacation because you cannot drive a car anymore.” The questions “Encountering a health problem during the trip” and “Taking a vacation in the past 12 months” were answered with Yes and No answers. Standard demographic questions were asked for age, gender, race, marital status, education level, and household income. As a result, a total of 423 questionnaires were completed. After the sorting out of interviewees ages, only those aged 65 and beyond qualified and thus only their surveys were saved, sequentially, a total of 339 interviewees’ questionnaires were kept to participate in data analysis.

Data analysis was conducted with SPSS software, version 17.0. Both descriptive and inferential statistics were employed for data analysis. The descriptive method documented respondents’ socio-demographic information and mean score descriptions of perceived constraints for reasons not to travel. The chi-square test was used to examine differences among the three age segments regarding whether or not they took a vacation trip in the past 12 months. Further, participants’ health statuses were compared within three different groups (young-old vs. old-old vs. oldest-old).

Finally, one-way analysis of variance was used to determine whether statistically significant differences existed among mean scores of the perceived constraints as reasons for not to travel and post-hoc analysis was used to further examine where differences exist among the four sub-groups.

**Results**

Of 339 respondents, 54% were young-old (N=184), 33% were old-old (N=113), and 13% were the oldest-old (N=42). The participants were predominantly older women (68%, N = 230), and the old men constituted 32% of respondents (N=108). The age of the sample ranged from 65 to 96 with a median age
equating to 74 years. The majority of participants were still married (N=187, 55%), while 40% (N=137) were widowed and a small portion (N=12; 4%) reported they were never married. Table 1 documents this demographic information.

<table>
<thead>
<tr>
<th>Table 1 Demographic Profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
</tr>
<tr>
<td>65-74</td>
</tr>
<tr>
<td>75-84</td>
</tr>
<tr>
<td>85+</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Marital status</td>
</tr>
<tr>
<td>Married</td>
</tr>
<tr>
<td>Widow</td>
</tr>
<tr>
<td>Never married</td>
</tr>
</tbody>
</table>

Further, descriptive statistics revealed that 70% of respondents reported they had taken a vacation in the past 12 months, vs. 30% who did not do so. This result was further examined by breaking
respondents into three age-segmented groups and running a chi-square analysis. The cross-tabulation showed significant differences among the three age-segmented groups. Interestingly, more than 70% of young old (74%), and old-old (71%) groups both reported having taken a vacation in the past 12 months, while over half of the oldest-old (55%) indicated they did not do so (Figure 1).

Figure 1. Comparison of statement “have take a vacation in the past 12 months across groups”

The analysis of self-reported health conditions via Chi-square analysis that was used to compare the three groups indicated the majority of young–old (58%) did not register a chronic condition while fifty-one percent of the oldest-old already had a chronic condition. Plus, thirty-three percent of the oldest-old had sustained some form of injury in the past 12 months and forty percent reported suffering from a fall-related bone fracture. On the other hand, only fourteen percent of young-old reported injuries in the past 12 month and only twenty-two percent suffered bone-fracture problems.
Descriptive statistics in Table 2 indicated the constraint items that were rated with the highest and lowest mean scores. The item with the highest mean score was “I will go if a family member will go with me (mean = 3.41).” The perceived constraint with the lowest mean scores were “don’t want to meet Stranger (mean = 1.74)” and “I cannot drive a car anymore (mean = 1.74)” Most constraint items were rated with a mean score below 2.0 based on a 5 point Likert-type scale. This indicates that on average, respondents tended to disagree with identified constraint statements with the exception of the item “I will go if a family member will go with me” which was positively coded (differently from others items).

<table>
<thead>
<tr>
<th>Constraint items</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Interest</td>
<td>330</td>
<td>1.95</td>
<td>1.22</td>
</tr>
<tr>
<td>No Money</td>
<td>330</td>
<td>2.34</td>
<td>1.19</td>
</tr>
<tr>
<td>No one to go with me</td>
<td>331</td>
<td>1.92</td>
<td>1.12</td>
</tr>
<tr>
<td>Don’t know where to go</td>
<td>330</td>
<td>2.02</td>
<td>1.03</td>
</tr>
<tr>
<td>No time</td>
<td>331</td>
<td>1.95</td>
<td>1.12</td>
</tr>
<tr>
<td>Will go if family go with me</td>
<td>329</td>
<td>3.41</td>
<td>1.26</td>
</tr>
<tr>
<td>Too old to travel</td>
<td>330</td>
<td>1.96</td>
<td>1.23</td>
</tr>
<tr>
<td>Cannot drive anymore</td>
<td>331</td>
<td>1.74</td>
<td>1.20</td>
</tr>
<tr>
<td>Don’t like to meet a stranger</td>
<td>329</td>
<td>1.74</td>
<td>.97</td>
</tr>
<tr>
<td>My health can’t afford to travel</td>
<td>330</td>
<td>1.90</td>
<td>1.09</td>
</tr>
</tbody>
</table>

The results from the one-way analysis of variance revealed that significant differences existed in many respects regarding reasons not to travel, including “no money,” “no time,” “feel too old to travel,” “cannot drive anymore,” “don’t want to meet a stranger” and “health condition cannot afford me to travel” (Figure 2). The LSD Post-hoc test was then run to discover where differences occur among the three
age groups regarding these items. The respondents in the oldest old group expressed their most significant concerns regarding travel were feeling too old (F=22.11, P<.000) and not being able to drive a car any more (F=16.87, P<.000), while young-old indicated they are significantly short of time (F= 3.37, p< .05) and money (F=4.3, p< .01) when compared to the oldest old respondents. The oldest-olds also indicated that “They don’t want to meet a stranger” and “Health cannot afford to travel” as other main reasons for them not to travel, which is significantly different from the other two groups. Table 3 displays results of the post-hoc test from a one-way ANOVA, dividing respondents into three subgroups.

**Figure 2 Significant differences revealed among four age-segmented groups**

<table>
<thead>
<tr>
<th></th>
<th>65-74</th>
<th>75-84</th>
<th>&gt;84</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>4.35</td>
<td>3.37</td>
<td>22.12</td>
</tr>
<tr>
<td>p</td>
<td>&lt;0.01</td>
<td>&lt;.05</td>
<td>&lt;.000</td>
</tr>
<tr>
<td></td>
<td>16.87</td>
<td>8.56</td>
<td>9.01</td>
</tr>
<tr>
<td></td>
<td>&lt;.000</td>
<td>&lt;.000</td>
<td>&lt;.000</td>
</tr>
</tbody>
</table>
Table 3. Post-hoc test of differences among three age-segmented groups

<table>
<thead>
<tr>
<th>Age</th>
<th>No Money</th>
<th>No Time</th>
<th>Too old</th>
<th>Not Drive</th>
<th>Meet a Stranger</th>
<th>Health Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-74</td>
<td>2.51a</td>
<td>2.06a</td>
<td>1.61a</td>
<td>1.44a</td>
<td>1.61a</td>
<td>1.71a</td>
</tr>
<tr>
<td>75-84</td>
<td>2.17b</td>
<td>1.88a</td>
<td>2.24b</td>
<td>1.93b</td>
<td>1.74a</td>
<td>2.00b</td>
</tr>
<tr>
<td>85+</td>
<td>2.1c</td>
<td>1.60b</td>
<td>2.80c</td>
<td>2.60c</td>
<td>2.31b</td>
<td>2.48c</td>
</tr>
</tbody>
</table>

* Different superscripts indicate statistically significant difference between groups

The study also revealed that there are a few shared perceived constrains across the three age-divided groups, including no interest, no one to go with, don’t know where to go, and will go if family members go with me.

Discussion

This study compared the sub-groups in the late life stages (the young-olds, the old-olds, and the oldest-old) and attempted to determine specific travel-related barriers associated with oldest-old individuals. The findings of this research revealed that significant differences exist regarding older adults’
perceived constraints to travel. The oldest-old adults were different from young-olds as well as those respondents in the old-old categories. They expressed a great deal of concern regarding their health conditions when it comes to travel. This is a consistent finding with previous research in both leisure and gerontology studies that revealed a significant change in individual health status once reaching 75 years of life (Beales & Tulloch, 2013). Similarly, research in the tourism field has found that older folks tend to show a high peak in travel during their early retirement years, then slow down when they reach age 75. The findings of this study support previous research and further validate the existing literature regarding constraints for older travelers.

Further, the oldest-old rated high on no-interest to meet strangers as their reason for not to travel in comparison with their other two counterparts (the young-old and old-old). In tourism research, it has often been reported that meeting a new friend is a motivation for some people to travel. However, for those oldest-olds in this study, they tend to disagree with the popular tourism literature. As a result, to meet someone new may not be a good motivation for older folks, instead, offering the opportunity to spend travel time with family and friends could be a motive for these senior participants. Supportively, Baltes & Baltes (1990) indicated that an individual’s emotional closeness to loved ones increases as they age. This statement can also be evidenced from a shared constraint among all three age-segmented groups: “will go if a family member will go with me,” gaining the highest mean score (3.41).

The oldest-old and the old-old showed significant differences on the items of “feel too old to travel” and “cannot drive a car anymore” from the young-old group. In tourism study, the research community suggests that during the earlier retirement years, travel tendencies increase. In the current
study, we found many older people did not feel they are too old to travel until they reached age 75 and beyond. Therefore, our study is consistent with precedent tourism research.

**Research implications and limitations**

The findings of this study have a profound implication: As our life expectancy continues to increase and the life course of many individuals already in their later life stages continues stretching, interests, preferences, and needs of older individuals in different age segments clearly become distanced from each other. We found older adults in three different age segments perceived their health condition, aging process, and travel preferences differently when it comes to reasons not to travel. Therefore, services and research on older travelers must recognize this population trend and reorient their efforts towards improving travel experiences for older adults within specific stages of late-life.

This study also found that the oldest-old indeed expressed greater concern for not driving a car as a barrier to travel. Since the findings of this research is congruent with previous literature documenting that the oldest-old are significantly less likely to take trips by automobile than the young-old (Davis et al., 2011), travel companionship is imperative to allowing the oldest-old to continue enjoying leisure travel, helping them maintain high quality of life.

While the findings of this study have contributed to the research and tourism service communities, still, no research can be immune from its limitations. This research has a few shortcomings due to a non-random sampling method used for the data collection. This study relied on available, convenient subjects; consequently, this may have threatened its external validity. Thus, it may be limited in its ability to be generalized to the entire population.
The other limitation of this study is its low sample size for the oldest-olds. According to the UN Department of Economic and Social Affairs’s report, the older population who are 85 and over is projected to be the fastest growing segment (increase by 151% by 2030).Consequentially, this study may soon not be considered as representative of the fast-growing oldest-old population. For future studies, we recommend increasing the sample size of oldest-olds or using weighted adjustment techniques to allow for the sample to represent the true population.

Regardless, the results of this study will certainly alarm professionals who provide services in the tourism and leisure industry to further differentiate preferences among older adults in various later life stages to ensure specific needs are being satisfied among the young-old, old-old and oldest-old individuals.

References


THE ROLE OF GUANXI AND XINYONG ON THE RELATIONSHIP BETWEEN SUPPLIER AND RETAILER AMONG CHINESE ENTREPRENEURS IN BEKASI CITY, INDONESIA

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Abstract

Purpose: The research objective is to measure the role of guanxi and xinyong among Chinese entrepreneurs, especially in the partnership relationship between cellular phone retailers and their suppliers at the Giant Hypermall in Bekasi, Indonesia. The research aims to test the effect of supplier competence on conflict handing, the effect of supplier competence on guanxi, the effect of supplier competence on commitment, the effect of conflict handling on guanxi, the effect of conflict handling on xinyong, the effect of conflict handling on satisfaction, the effect of conflict handling on commitment, the effect of guanxi on xinyong, the effect of guanxi on satisfaction, the effect of commitment on guanxi, the effect of commitment on satisfaction, the effect of xinyong on partnership relationship, the effect of satisfaction on xinyong, and the effect of satisfaction on partnership relationship.

Design/methodology/approach – This research used 248 samples and the respondents were cellular phone retailers at Giant Hypermall in Bekasi, Indonesia. This research used SEM analytical technique with Smart Partial Least Squares (SmartPLS).

Findings - The result confirmed thirteen out of fourteen hypotheses, and the fifth hypothesis was unsupported.

Originality/value – This research contributes to the study of guanxi and xinyong on Indonesian-Chinese business relationships.

Keywords Chinese business, Guanxi, Xinyong, Personal Relationship
1. INTRODUCTION
Cellular phones are retailed, especially at Giant Hypermall in Bekasi and are dominated by Chinese retailers. Furthermore, the study was moved by an interesting phenomenon of partnerships between Chinese retailers and Chinese suppliers in retailing cellular phones in Bekasi, Indonesia. Partnership relationship between suppliers and retailers was built as a long term relationship by Chinese entrepreneurs. Personal relationship and trust relationship has been the basis in the overseas Chinese business network (Purwanto, 2014), likewise in this case. In the Chinese social capital model, personal relationship was identified by the term, guanxi, and personal trust was identified by the term, xinyong (Purwanto, 2014). The retailers build guanxi and xinyong with suppliers through utilising ethnicity, ethnic language and trust.

The previous studies showed the phenomenon among overseas Chinese entrepreneurs. Leung et al. (2005) found the role of guanxi and xinyong on partnership relationship in Chinese relationship marketing. Purwanto (2014) found the effect of guanxi on xinyong and the effect of xinyong on Chinese partnership relationship. The study was conducted in Jakarta. Huang et al. (2013) found the effect of guanxi on trust in Chinese business, and the trust has a positive effect on Chinese businesses being successful.

Based on above background, the study investigated the role of guanxi and xinyong on the partnership relationship between supplier and retailer among Chinese entrepreneurs in Bekasi, Indonesia. This conceptual framework was adapted from Leung et al. (2005), to investigate: (1) the effect of supplier competence on conflict handling, (2) the effect of supplier competence on guanxi, (3) the effect of supplier competence on commitment, (4) the effect of conflict handling on guanxi, (5) the effect of conflict handling on xinyong, (6) the effect of conflict handling on satisfaction, (7) the effect of conflict handling on commitment, (8) the effect of guanxi on xinyong, (9) the effect of guanxi on satisfaction, (10) the effect of commitment on guanxi, (11) the effect of commitment on satisfaction, (12) the effect of xinyong on partnership relationship, (13) the effect of satisfaction on xinyong, and (14) the effect of satisfaction on partnership relationship.

2. LITERATURE REVIEW
2.1. The Role of Guanxi and Xinyong in Chinese Business
Purwanto (2014) found the effect of guanxi on xinyong and the effect of xinyong on Chinese partnership relationship. According to Leung et al. (2005) the managing director of Gree Group Corporation, a large electrical appliance manufacturer in the PRC, mentioned that based on trust or xinyong, its sales personnel were able to generate an annual turnover of RMB $10 billion without signing a single contract with its retailers (Apple Daily News, 21 April 2002). Furthermore, Leung et al. (2005) said that it indicates that xinyong is vital to develop partnership relationships between buyers and suppliers among the Chinese. Huang et al. (2013) found that guanxi influences trust in Chinese business.
and creates successful business. Ai (2006) shows that China’s market potential is unparalleled, and previous studies on doing business in China found that the concept of guanxi or a social and business relationship network is the key to being a successful business in China. Tavares (2013) found that network is an important thing for Chinese entrepreneurs. According Leung et al. (2010), Chinese managers prefer to negotiate with their old friends or their guanxi persons to conduct partnership relationships. Tong and Yong (1998) conducted a study in Singapore and Malaysia and found that personal control, personal guanxi relationships, and interpersonal trust or xinyong were three key aspects of personalism that had a relationship in business relations.

2.2. Supplier Competence and Conflict Handling
According to Leung et al. (2005) supplier competence is a supplier who has the ability or quality to handle a particular situation. The perceived expertise or competence of suppliers is a major determinant on effective communication between supplier and retailer (Hovland and Weiss, 1951, in Leung et al., 2005). The competence includes technical expertise regarding the product and production methods, and knowledge of the customer’s organisation, markets, competitors, and industry (Cravens et al., 1992, in Leung et al., 2005). In his study that used a sample of 400 manufacturing SMEs in Taiwan, Chinomona (2013) found that a dealer has legitimate power on cooperation, relationship commitment, relationship satisfaction and trust. Furthermore, Leung et al. (2005) found that supplier competence impacted on conflict handling in Chinese businesses in China. Therefore, based on the above arguments, we built a hypothesis as below:

H1: Supplier competence influences conflict handing in the relation between suppliers and retailers.

2.3. Supplier Competence and Guanxi
In general, supplier competence is evaluated based on their product price, product quality, and service quality as assurance that was expected by retailers (Carpenter, 1993; Hutt and Speh, 1995; Leung et al., 2005). According to Leung et al. (2005), guanxi has a crucial role in the supplier searching process in Chinese business to build the business network (Bigsten et al., 1998; Macmillan and Woodruff, 1999; Milington et al., 2006). Leung et al. (2005) found that supplier competence has a positive and significant effect on guanxi. Therefore, based on the arguments, we build a second hypothesis as below:

H2: Supplier competence has an effect on guanxi.

2.4. Supplier Competence and Commitment
Previous studies show that retailers evaluated suppliers based on their competence, quality of product, and services (Hendrick and Ruch, 1998; Leung et al., 2005) through considering commitment of their supplier. A retailer will evaluate whether a supplier did things appropriate with the agreement that was agreed before, that orientates on a long term partnership relationship. If a supplier has good competence on his commitment, he will give satisfaction in his performance to retailer. To preserve commitment in partnership relationship, sometimes there is a need for sacrifices of a supplier to keep a long term
relationship (Anderson and Weitz, 1992). If either supplier or retailer breaks their commitment, it will impact on their relationship and their dissatisfaction. Leung et al. (2005) found a significant effect of supplier competence on commitment. Based on the arguments, we build the third hypothesis as below:

H3: Supplier competence influences the level of commitment.

2.5. Conflict Handling and Guanxi

Conflict handling on disputes arising in the partnership can improve personal relationships (guanxi) between the two parties (Leung et al., 2005). Bian (1997) noted that the most important characteristic of guanxi is an obligation to look after each other and reciprocation and conflict handling. Failure to show returning the favour can result in the loss of one’s guanxi network (Lee et al., 2001; Milington et al., 2006). Good conflict handling can build guanxi to be good, but if the conflict handling was conducted by supplier was not good, it will make a guanxi and partnership relationship being lost as a result of disappointment on the supplier or otherwise. Leung et al. (2005) found a significant effect of conflict handling on guanxi. Based on the arguments, the fourth hypothesis can be built as below:

H4: Good conflict handling will influence a guanxi.

2.6. Conflict Handling and Xinyong

Previous studies showed that conflict handling is essential to maintain the relationship between suppliers and retailers (Dawyer et al., 1987; Gundlach and Murphy, 1993; Sheth, 1973; Leung et al., 2005). Conflicts between supplier and retailer is one thing that may happen during its building during both short term and long term relationships. According to Anderson and Narus (1990), communication is a strong determinant in building trust (Selnes, 1998). With good skills in handling conflict, the supplier will be able to build xinyong of its performance, so it can improve their long-term partnership relationship. But if the supplier cannot handle conflict well, then xinyong between them will decrease or decline, it may cause partnership relationship to be ended. Leung et al. (2005) found a significant effect of conflict handling on xinyong. Based on the arguments, the fifth hypothesis can be built as follows:

H5: Good conflict handling will influence xinyong between supplier and retailer.

2.7. Conflict Handling and Satisfaction

Previous research showed that Chinese entrepreneurs typically use a system of negotiation to give up something in order to produce a solution to achieve common goals, which can be agreed upon and create satisfaction among all parties (Stewart and Keown, 1989; Leung and Yeung, 1995; Leung et al., 2010). Churchill and Surprentant (1982) and Oliver (1980) predicted that satisfaction is achieved when expectations are met, and if expectations are not met, then the satisfaction is not achieved. When a retailer was satisfied by suppliers’ performance or service, it means they judged that the supplier is able to deliver what is expected in terms of problems handling that occurred, thus reducing the risk to switch to another supplier. A higher ability of a supplier in addressing the issue will create higher satisfaction of a retailer toward suppliers’ performance (Selnes, 1998). Good communication is expected to become an important
source of satisfaction because it can lead to a common understanding related to performance results and expectations (Selles, 1998). Leung et al. (2005) found a significant effect of conflict handling on satisfaction. Based on the previous studies, the sixth hypothesis can be constructed as follows:

\( H_6 \): Good conflict handling can raise satisfaction of partnership relationship.

### 2.8. Conflict Handling and Commitment

The previous study shows that commitment can establish a long-term partnership relationship through good conflict handling of the supplier (Morgan and Hunt, 1994). With the good conflicts handling of supplier, it will be influential in building the commitment of both parties to conduct a long-term partnership relationship. Commitment is one important influence in a partnership relationship. Commitment can occur if retailers get good service and good conflict management. If the conflict handling was not done by the supplier, it will damage the commitments established by both parties and may give rise to a sense of injustice. Leung et al. (2005) found a significant effect of conflict handling on commitment. Based on the previous study, the seventh hypothesis can be constructed as follows:

\( H_7 \): Conflict handling will influence the commitment of partnership relationship.

### 2.9. Guanxi and Xinyong

Purwanto (2014) found that \textit{guanxi} has a positive and significant impact on \textit{xinyong}, and \textit{xinyong} a positive impact on the partnership relationship. Huang et al., (2013) found a positive impact of \textit{guanxi} on trust, and trust has a positive impact on the success of Chinese business. According to Kriz and Fang (2003), \textit{guanxi} seems to just be supportive or a background that might act as a door opener of relationships with retailers. Matthysens and Faes (2006) in Zolkiewski and Feng (2012) showed that building trust is an important element in the Chinese business relations and trust between individuals can strengthen and deepen business relationships. Matthysens and Faes (2006) and Kriz and Fang (2003) in Zolkiewski and Feng (2012) found that \textit{guanxi} acts as an initiator, while the trust relationship determines how successful the relationship is. With good guanxi, it will raise the trust of a person to do an important thing. Leung et al. (2005) found a significant effect of \textit{guanxi} on \textit{xinyong}. Based on the arguments, the eighth hypothesis can be built as follows:

\( H_8 \): \textit{Guanxi} has a positive effect on \textit{xinyong}.

### 2.10. Guanxi and Satisfaction

Numerous studies show that \textit{guanxi} has an influence on satisfaction in building partnership. \textit{Guanxi} can develop and maintain a partnership relationship (Lin, 2011; Huang et al., 2013). People tend more likely to cooperate with people who are close and not those who are new (Bian, 1994; Milington et al., 2006). Relationships that are built through \textit{guanxi} can create satisfaction of performance accomplishments for their brotherly relationship. Furthermore, Leung et al. (2005) found a significant effect of \textit{guanxi} on satisfaction. Based on the arguments we made the ninth hypothesis as follows:

\( H_9 \): Guanxi influences satisfaction in partnership relationship.
2.11. Commitment and Guanxi
Guanxi in business relationships are a commitment to do the best for one another with the social norms of reciprocity and social obligations (Hwang, 1987; Luo, 1997). That is, if you get help based on human obligations, you are obliged to pay back in the future. Damaging this norm will damage someone’s reputation and would cause a loss of face (Dong-Jin and Wong, 2001). Commitment is an agreement that was agreed by both parties. High commitment will create guanxi between Chinese people. Leung et al. (2005) found a significant effect of commitment on guanxi. Based on the arguments, we made the tenth hypothesis as below:
H_{10}: High commitment will influence good guanxi.

2.12. Commitment and Satisfaction
Commitment is the strongest antecedent of partnership relationship between the two parties (Morgan and Hunt, 1994; Parasuraman et al., 1985; Leung et al., 2005). Maintaining a commitment in a partnership relationship can reduce the risk of loss of partnership (Morgan and Hunt, 1994; Wong et al., 2008). Commitment can encourage satisfaction of retailers (Selnes, 1998). Adjustment of both products and services of the supplier with retailer demand will increase partnership satisfaction. However, if the supplier does not ignore demand or expectation of retailers, it will create dissatisfaction. Leung et al. (2005) found a significant effect of commitment on satisfaction. Based on the arguments, we made the eleventh hypothesis as below:
H_{11}: Commitment has an impact on satisfaction in partnership relationship.

2.13. Xinyong and Partnership Relationship
Trust is the key in building a partnership relationship, and trust is a way to preserve the partnership relationship (Morgan and Hunt, 1994). Crosby et al. (1990) found that trust and satisfaction are an important aspect of the relationship quality that lead to future purchase intentions. Chua et al. (2009) found that trust becomes an important variable in the process of establishing partnership relationship. Mutual trust was far more important than a written contract or agreement in Chinese business. If several violations occurred in the purchase agreement, both parties tend to negotiate these issues face-to-face rather than go to court. Through trust in the partnership relationship between suppliers and retailers, a good long-term partnership will be established. But if one of the parties undermines the agreement, he will lose trust and network. Leung et al. (2005) found a significant effect of trust or xinyong on partnership relationship. Based on the arguments, we made the twelfth hypothesis as below:
H_{12}: There is effect of xinyong on a long-term partnership relationship.

2.14. Satisfaction and Xinyong
The previous study shows that when the supplier did business properly, then it will create trust for the
retailer. The retailer will feel secure and satisfaction and that will then generate a good evaluation on the supplier and will create a good long term partnership relationship (Revald and Grönroos, 1996; Leung et al., 2005). The satisfaction that was felt by the retailer will raise trust on the supplier’s performance in the partnership relationships. But if the supplier cannot give satisfaction towards the retailer, it will not create good trust in a partnership between the two parties. Based on the arguments, we build the thirteenth hypothesis as below:

\[ H_{13} \]: Satisfaction has an effect on xinyong in partnership relationship.

2.15. Satisfaction and Partnership Relationship

Previous studies show that satisfaction of a retailer based on the products and services that were provided by suppliers were important to preserve a partnership relationship (Fornell, 1992; Hirschman, 1970; Leung et al., 2005) and vice versa if satisfaction is not perceived by the retailer, which will cause a negative impact on the performance of a supplier (Richins, 1983; Singh, 1988; Leung et al., 2005). Ganesan (1994) found that the relationship quality, such as satisfaction in relationships has a correlation with long-term orientation in partnership relationship (Lee and Wong, 2001). Leung et al. (2005) found a significant effect of satisfaction on partnership relationship. Furthermore, based on the arguments, we made the fourteenth hypothesis as below:

\[ H_{14} \]: Satisfaction will influence partnership relationship.

Figure I – Conceptual Framework

3. METHOD

This study was conducted in Giant Hypermall in Bekasi, Indonesia. We shared the questionnaires to cellular phone retailers with the use of non-probability technique sampling. The sample in the study had 248 samples. All scale items, measurement scale of supplier competence, commitment, conflict handing,
guanxi, xinyong, satisfaction, and personal relationship used the measurement scale by Leung et al. (2005). Furthermore, in the study we used Structural Equation Modelling (SEM) technique with Smart Partial Least Squares (SmartPLS).

4. RESULTS
4.1. Validity and Reliability
In Table I, convergent validity shows outer loadings values > 0.60, as referred to by Hair et al. (2011) and Hair et al. (2012) in which squared standardised outer loadings should be higher than 0.70, but if it is an exploratory research, 0.4 or higher is acceptable (Hulland, 1999, in Wong, 2013). Therefore, all indicators were valid. Likewise, AVE value was > 0.50, as referred to by Chin (1995) in which AVE should be higher than 0.50; Therefore, all constructs were valid. Composite Reliability value of all constructs were > 0.70, as referred to by Hair et al. (2012) in which composite reliability should be higher than 0.70; Therefore, all constructs were reliable.

Table I - Reflective Outer Models

<table>
<thead>
<tr>
<th>Items</th>
<th>Outer Loadings</th>
<th>Convergent Validity</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td></td>
<td>AVE = 0.55</td>
<td>0.79</td>
</tr>
<tr>
<td>Item 1</td>
<td>0.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 2</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 3</td>
<td>0.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict Handing</td>
<td></td>
<td>AVE = 0.62</td>
<td>0.87</td>
</tr>
<tr>
<td>Item 1</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 2</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 3</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 4</td>
<td>0.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guanxi</td>
<td></td>
<td>AVE = 0.53</td>
<td>0.82</td>
</tr>
<tr>
<td>Item 1</td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 2</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 3</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 4</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Relationship</td>
<td></td>
<td>AVE = 0.54</td>
<td>0.82</td>
</tr>
<tr>
<td>Item 1</td>
<td>0.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 2</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 3</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 4</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td>AVE = 0.58</td>
<td>0.85</td>
</tr>
<tr>
<td>Item 1</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.2. Hypotheses Test

The output of PLS shows that except H₅, all of the hypotheses were supported, in which the t-value was > 1.96 as on Table II. Firstly, the supplier competence is a significant influence to conflict handling, both in keeping a good communication and partnership relationship. This finding supported the research findings by Anderson and Weitz (1989), Swan et al. (1985) and Selnes (1998) and Leung et al. (2005). Secondly, the study proved that supplier competence influences guanxi between suppliers and retailers. This finding supported the research findings by Carpenter (1993), Hunt and Speh (1995), Leung et al. (2005), and Milington et al. (2006). Thirdly, the study found that supplier competence influenced commitment of suppliers to give their best to retailers. Its finding supported the research finding by Leung et al. (2005). Fourthly, the study proved that conflict handling can lead guanxi between suppliers and retailers. Its finding supported the research findings by Lee et al. (2001) and Milington et al. (2006). Fifthly, the study found a positive effect of conflict handling on xinyong, but not significant. Its finding did not support the research finding by Anderson and Narus (1990) and Leung et al. (2005). Sixthly, the study found that the conflict handling ability of a supplier has a significant effect on retailers’ satisfaction. Its finding supported the research findings by Churchill and Surpremant (1982), Oliver (1980), Selnes (1998) and Leung et al. (2005). Seventhly, the study proved that conflict handling has an effect on commitment and it supported the research findings by Morgan and Hunt (1994) and Leung et al. (2005).

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>t-value</th>
<th>β-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier Competence &gt;Conflict Handling</td>
<td>H1</td>
<td>6.97</td>
</tr>
<tr>
<td>Supplier Competence &gt;guanxi</td>
<td>H2</td>
<td>3.25</td>
</tr>
<tr>
<td>Supplier Competence &gt;Commitment</td>
<td>H3</td>
<td>3.72</td>
</tr>
<tr>
<td>Conflict Handling &gt;guanxi</td>
<td>H4</td>
<td>3.36</td>
</tr>
<tr>
<td>Conflict Handling &gt;xinyong</td>
<td>H5</td>
<td>0.54</td>
</tr>
<tr>
<td>Conflict Handling &gt;Satisfaction</td>
<td>H6</td>
<td>2.61</td>
</tr>
<tr>
<td>Conflict Handling&gt;Commitment</td>
<td>H7</td>
<td>4.43</td>
</tr>
<tr>
<td>Guanxi&gt;xinyong</td>
<td>H8</td>
<td>2.23</td>
</tr>
</tbody>
</table>
Eighthly, the study found that guanxi (personal relationship) has a positive and significant effect on xinyong (trust relationship) and it supported the research findings by Matthysens and Faes (2006), Zolkiewski and Feng (2012), and Leung et al. (2005). Ninthly, the study proved that guanxi influenced the satisfaction in the partnership relationship. It supported the research findings by Bian (1994) and Milington et al. (2006) and Leung et al. (2005).

Tenthly, the study found that commitment of a supplier to give their best built good guanxi and it supported the research findings by Hwang (1997), Luo (1997), Lee and Wong (2001), and Leung et al. (2005). Eleventhly, the study found that commitment influenced the retailer’s satisfaction and it supported the research findings by Johanson et al. (1991) and Selnes (1998), and Leung et al. (2005).

Twelvethly, the study proved that xinyong relations influenced partnership relationships in Chinese business and it supported Morgan and Hunt (1994) and Leung et al. (2005). Thirteenthly, the study found that retailers’ satisfaction can build xinyong relations and it supported research findings by Revald and Gronroos (1996), but it did not support research findings by Leung et al. (2005). Fourteenthly, the study found that satisfaction created a partnership relationship between suppliers and retailers in Chinese business. It supported the research findings by Garbarino and Johnson (1999), Fornell (1992), Hirchman (1970), Selnes (1998), Richins (1983), Singh (1988) and Leung et al. (2005).

CONCLUSION
The study shows that except the fifth hypothesis, all hypotheses are accepted. It shows that the roles of guanxi and xinyong in Chinese partnership relationships in business are crucial. Although the level of acculturation of Indonesian Chinese with indigenous cultures is deep (Suryadinata, 1999), the Chinese business values however still has similarity with other overseas Chinese and Chinese in China Mainland. Guanxi and xinyong are still playing important roles in business networks or partnership relationships between Chinese retailers and suppliers in cellular phones retailing in Bekasi, Indonesia.

ACKNOWLEDGEMENT
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IMPACT OF DIVIDEND ANNOUNCEMENT ON STOCK RETURN: A STUDY ON LISTED COMPANIES IN THE SAUDI ARABIA FINANCIAL MARKETS

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Abstract

This study attempts to investigate the stock prices response to dividend announcement of 10 companies listed in Saudi Arabia Financial Markets during the period 2014-2015. The purpose of the study is to identify whether there are any significant abnormal returns around the public announcement of dividend. An event study methodology is used for an event window of twenty days surrounding the announcement day. Research result indicates that the stock prices move upward significantly after dividend announcements. Abnormal return (AR) and cumulative abnormal return (CAR) from the market model are statistically significantly revealed. The results confirm dividend signaling theory as the dividend announcements have significant impact on share prices.

Keywords: dividend announcement, abnormal returns, event study

1. Introduction

The subject matter of dividend policy remains one of the most controversial issues in corporate finance. For more than half a century, financial economists have engaged in modeling and examining corporate dividend policy. Black (1976) hinted that, “The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that don’t fit together”. The goal of manager is shareholder wealth maximization which means maximizing the value of the company as measure by the price of common stock. The impact of dividend policy on shareholders wealth is still unsolved. For example, Bernartzi and al. (1997) found that announcement of dividend increases result in positive abnormal returns whereas, the stock price react negatively with announcement of dividend payout decrease.

The purpose of this paper is to observe whether stock price reacts to the announcement of dividend in Saudi Arabia Financial Markets. It investigates whether dividend announcement result in an abnormal return around the announcement day.
2. Literature Review

The stock prices reaction to dividend announcement has attracted much attention among accountants and financial economists. In a pioneering article Modigliani and Miller (1961) argued that dividends policy is irrelevant for the value of the firm in a world without taxes or transaction cost. M&M concluded that given firms optimal investment policy, the firm’s choice of dividend policy has no impact on shareholders wealth. In other words, all dividend policies are equivalent. The study, by Abbas (2015) on listed companies in the Damascus Securities Exchange, finds support for the irrelevance theory. In fact, there are no significant abnormal return prior to the announcement day which may imply that there is no significant leakage prior to the dividend declaration.

However, several studies imply that dividend announcements convey information and consequently affect share prices. Indeed, Allen and Michaely (2003) found that the dividend has a significant price effect and stock prices reaction is positively correlated to the dividend change announced by the firm since dividend has information content.

The same result was founded by Suwanna (2012) in the context of 60 Thai companies in financial industry listed on the stock exchange of Thailand during 2005-2010. The study indicates that the stock prices move upward significantly after dividend announcement. This result confirms “Dividend signaling theory” as the dividends have a positive significant impact on share prices.

Furthermore, the results of Aamir and Shah (2011) indicate that impact of dividend on dividend announcement date and few days after were positive. It shows that dividend distribution is relevant for future price determination.

Dhamarathne (2013) attempted to examine the stock price reactions to dividend announcements of 61 firms listed on Colombo Stock Exchange for the periods of 1998 to 2005. His results show that market responds positively to subsequent dividend announcements. More specifically, dividend increase announcements support the information content of dividend hypothesis and the “Bird in Hand” theory (Amidu, 2007). This theory argues that shareholder prefer a high dividend policy. They prefer a dividend today to a highly uncertain gain from a future investment. Moreover, dividend decrease announcements and dividend no change announcements against with the information content of dividend hypothesis.

On the other hand, the study of Wang (2014), which based upon a sample of 350 firms listed on the Shanghai Stock Exchange, finds a significant positive reaction between stock dividend announcement and stock returns but there was a significant negative reaction between cash dividend announcement and stock returns.
3. Research Methodology

3.1. Sample selection

The main objective of this study is to investigate the impact of dividend announcements on stock market returns with the help of event study round the dividend announcement date. Therefore, reaction of dividend will be checked on stock returns. For this study, data has been manually collected from the website of Saudi Arabia Financial Market during the period 2014-2015. The following criteria are used to select the firms for the study: the firm must have announced dividend payment. The company must have at least 130 day trading share prices before and at least 10 day trading share prices after the dividend announcement. The final observations consist of 10 dividend announcements for 10 companies. Impact of dividend announcements on stock prices of 10 days before this announcement and 10 days after this announcement has been checked in this study.

3.2. Event Study Methodology

Event studies is statistical techniques for analyzing the pattern of stock prices and returns when a special event occurs – dividend announcement. The event study methodology has steps presented as follows (Shweitzer, 1989):

- The event date: is the dividend announcement date, when the board of directors has proposed the dividend proposal, is defined as t= 0,

- Event window: is the event period that fix the time period over which the share prices of the firms are involved. The choice of a broad event window (of -10, +10) is made in order to capture this possible pre-event reaction, that is, from 10 trading day before the dividend announcement to the 10 trading day after the event.

- Estimation period: is a period before event window used to estimate Market Return parameters (α, β). In this study we defines an estimation window period of 120 days before the event period
Figure 1 shows the time scale for event study:

![Time scale for event study](image)

- The daily closing prices were used to calculate the actual return for each stock and for the market index using the following formula:

$$ R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}} $$  \hspace{1cm} (1)

Where: $R_{it}$ is the actual rate of return on stock (i) at date (t), $P_{it}$ and $P_{it-1}$ denote the closing stock prices at dates t and t-1.

The rate of returns for each stock during the estimation period is used to estimate the market model ($\alpha_i$; $\beta_i$).

$$ E(R_{it}) = \alpha_i + \beta_i \times R_{mt} + \epsilon_t $$  \hspace{1cm} (2)

Where $E(R_{it})$, $R_{mt}$ are the expected returns on the stock (i) and on the Financial Saoudian Market index at date t respectively.

Then, the market model is used to calculate the expected rate of return for each stock during an event window of 21 days; that is 10 days before the dividend announcement, the announcement day and 10 days after the announcement.

- Abnormal Return $AR_{it}$ are calculated on each of the 21 days for each stock as:

$$ AR_{it} = R_{it} - E(R_{it}) $$  \hspace{1cm} (3)

- Average daily abnormal return $AAR_t$ for each day during event period are calculated:

$$ AAR_t = \frac{1}{n} \sum_{t=1}^{n} AR_{it} $$  \hspace{1cm} (4)
- Cumulative average abnormal return $CAAR_j$ are calculated as:
  \[
  CAAR_j = \sum_{t=1}^{j} AAR_{it}
  \]  
  (5)

4. Results

The average abnormal return and the cumulative average abnormal return for 21 days window are presented in table 1.

**Table 1:** average abnormal return and the cumulative average abnormal return for 21 days window

<table>
<thead>
<tr>
<th>Day</th>
<th>AAR</th>
<th>$T_{AAR}$</th>
<th>CAAR</th>
<th>$T_{CAAR}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-10</td>
<td>0.00255642</td>
<td>1.93229286</td>
<td>0.0025564</td>
<td>0.6109790</td>
</tr>
<tr>
<td>t-9</td>
<td>0.00202269</td>
<td>1.52886656</td>
<td>0.0045791</td>
<td>0.7738556</td>
</tr>
<tr>
<td>t-8</td>
<td>0.00596615</td>
<td>4.50956155</td>
<td>0.0105452</td>
<td>1.4550916</td>
</tr>
<tr>
<td>t-7</td>
<td>0.0024473</td>
<td>1.84981119</td>
<td>0.0129925</td>
<td>1.5525957</td>
</tr>
<tr>
<td>t-6</td>
<td>0.01067918</td>
<td>8.07194282</td>
<td>0.0236717</td>
<td>2.5301063</td>
</tr>
<tr>
<td>t-5</td>
<td>-0.0041321</td>
<td>-3.123277</td>
<td>0.0195396</td>
<td>1.9064905</td>
</tr>
<tr>
<td>t-4</td>
<td>0.00303331</td>
<td>2.29275078</td>
<td>0.0225729</td>
<td>2.0390739</td>
</tr>
<tr>
<td>t-3</td>
<td>-0.0018812</td>
<td>-1.42197294</td>
<td>0.0206916</td>
<td>1.7484146</td>
</tr>
<tr>
<td>t-2</td>
<td>-0.0015996</td>
<td>-1.20906788</td>
<td>0.0190920</td>
<td>1.5209879</td>
</tr>
<tr>
<td>t-1</td>
<td>0.00059402</td>
<td>0.44899759</td>
<td>0.0196861</td>
<td>1.4873037</td>
</tr>
<tr>
<td>t=0</td>
<td>0.0092826</td>
<td>7.01633031</td>
<td>0.0289687</td>
<td>2.0874999</td>
</tr>
<tr>
<td>t+1</td>
<td>-0.0029830</td>
<td>-2.25477502</td>
<td>0.0259856</td>
<td>1.7928193</td>
</tr>
<tr>
<td>t+2</td>
<td>-0.0014992</td>
<td>-1.13324306</td>
<td>0.0244863</td>
<td>1.6231037</td>
</tr>
<tr>
<td>t+3</td>
<td>0.00269515</td>
<td>2.03714903</td>
<td>0.0271815</td>
<td>1.7362139</td>
</tr>
<tr>
<td>t+4</td>
<td>0.00659762</td>
<td>4.9868646</td>
<td>0.0337791</td>
<td>2.0844741</td>
</tr>
<tr>
<td>t+5</td>
<td>0.001415</td>
<td>1.66953977</td>
<td>0.0351941</td>
<td>2.1028288</td>
</tr>
<tr>
<td>t+6</td>
<td>-0.0012528</td>
<td>-0.9469946</td>
<td>0.0339412</td>
<td>1.9674202</td>
</tr>
<tr>
<td>t+7</td>
<td>0.0027438</td>
<td>2.07392057</td>
<td>0.0366850</td>
<td>2.0665531</td>
</tr>
<tr>
<td>t+8</td>
<td>-0.0058127</td>
<td>-4.39362142</td>
<td>0.0308723</td>
<td>1.6927225</td>
</tr>
<tr>
<td>t+9</td>
<td>9,9336E-05</td>
<td>0.07508402</td>
<td>0.0309716</td>
<td>1.6551705</td>
</tr>
<tr>
<td>t+10</td>
<td>0.00408299</td>
<td>3.08616228</td>
<td>0.0350546</td>
<td>1.8282335</td>
</tr>
</tbody>
</table>

The average abnormal return 10 days before the dividend announcement is equal to (0.0196) while it is (0.035) 10 days after the dividend announcement. The table shows 14 positive abnormal return and 7 negative abnormal returns throughout the event window. So, positive reactions are more than negative. The highest average abnormal return is on event day which is 0.0092 and it is statistically significant. The market reaction occurs on event day, the AAR was equal to zero at t-1 while it reaches the maximum on event day (t=0). There is a quick and positive response of stock prices to dividend announcement. This evidences that dividend information immediately reflects on stock prices. The lowest average abnormal return is on day t+8 and equal to -0.00581.

In addition, it shows that the AAR of days -8, -6, -5 and -4 are +0.06, +0.01, -0.004 and 0.003
respectively. These are statistically significant at 5% level. This suggests that market reacts earlier than the actual announcement of dividend. Therefore, it implies that there is a leak in information relating to final dividend announcements.

During the post announcement periods, AAR are significantly different from zero except for days 2, 5, 6 and 9 which are close to zero and insignificants. This indicates that the market reacts both immediately and even a few days after the announcement of dividend is made. It is important to note that a number of days during the window period are not statistically significant. It may be a result of any other information other than dividend announcements. Thus, the share price is affected by some external factors such as economic, political, social…

Results reported in table (1) also shows that the cumulative average abnormal returns are significantly different from zero and positive mainly after dividend announcement. This could be explained by the fact that positive AAR are more than negative one. This result means investors can earn an abnormal return after the information release (Abbas, 2015).

Figure 2: AAR and CAAR around dividend announcement days

Figure 2 indicates that the average abnormal return fluctuates surrounding zero in alternating days giving uncertain indication of investors gain or loss both in the pre and post dividend announcement days.

It shows also, the cumulative average abnormal return. There is quick response to dividend announcements on day 0 and it is a positive response. This evidence supports the proposition with regard to a positive dividend announcement, there must be a positive announcement effect, and it suggests that dividend announcements have an important informational content. This results confirm dividend signaling theory.
5. Conclusion

The aim of this study was to contribute to the existing literature regarding stock prices reaction to dividend announcement. In order to achieve this goal, an event study methodology was be employed to a total sample of 10 listed companies in the Saudi Arabia financial Markets for the period 2014-2015. The finding of this study indicates that there is an immediately positive response of stock prices to dividend announcement. This evidences that dividend information reflects on stock prices. In addition, results show that market reacts earlier than the actual announcement of dividend. Therefore, it implies that there is a leak in information relating to final dividend announcements. This result is coherent with signaling theory.

However there are several no significant abnormal return, which may also be explained by the impact of other factors external to the study.

References


Working paper.
ASSESSING THE RISK OF CORPORATE STRATEGIC CHANGE:
THE DEVELOPMENT OF A FRAMEWORK TO ASSIST THE RISK
MANAGEMENT PROCESS ADAPTATED BY A CONTRACTING
COMPANY

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Abstract
Recently the environmental changes in the middle east have become a real challenge for companies to survive, many studies had focused on the effects of these changes on financial side, few have taken the other part of changes in products or services of the company and how do these changes affect the survival of the company, what are the risks that may arise or come as a consequence of the changes adopted, and this study came to add to the literature and body of knowledge in this part. Semi structured interviews was the data collection tool, and the company specified lies in Gulf, it is specialized in Industrial Contracting, nine interviews were conducted with the members of the top management of the company (Business Development manager, HR director, Managing Director, Operations Manager, Supply chain Manager, financial Manager, Project controls and planning manager, and two project managers), those are the ones involved in preparing and controlling the risk management plan for the company.
The results showed that the risk management plan is a vital step in any strategy for adopting change, there should be a clear contingency plans in emergency cases, more details will be found in the results and conclusions chapters of this study.

Key words: Risk, Change, Product change, Service Change, Middle East.

1. Introduction

The dynamic changes that happen within the organization environment have been affecting the performance of those organizations, and it has been considered a challenge how they will react to stay alive and compete in such changing environment, where the change sometimes is not an option for the company, but it is a must for the company to survive.
A lot of previous researches and studies have searched the effect of those changes on financial side of
organizations, this study will try to make another perspective and searching a new paradigm, in which it will explore and investigate the risks that arise from the changes in the work field of the company, in another word this research will explore the risks that may arise from changing the product or service that the company serve for its clients and customers due to environmental changes, here comes the important of having a risk management plan and seek the opportunities through it to gain a sustained competitive advantage.

Risk management is increasingly being recognized as an important issue in the work place. Being a manager in a company; it's important to understand the risks that may arise from the changes that faces the company, and make a good plan to face all possibilities (Gordon et.al. 2009, Zhao et.al.2014).

Facing the risks that may arise due to changing environment, is not only done by avoiding risks or mitigating its effect, but also by exploit any opportunity that arise from it for the best interest of the company (Woods 2009, Allen et all 2015).

This study focuses on studying how to help the selected company to stay one of the best in the field and to be able to compete with its rivals in the industry.

2. Literature Review

Change management is a major challenge in developing organizational systems, because it affects every single activity in the organization. Concerning the most significant conditions that should be taken into consideration in order to ensure success Kotter (1998), specifies that the most important condition is the sense of urgency by the top and senior management members in the organization.

The "change" that will take place to the organization is internal. This means that the change will be done "within the confines of the company and not in the outside environment" (Kotter, 1998).

There are many drivers for change in organizations; however, it might be completely an externally oriented change. For example, many companies are enforced to make adjustments in their policies or make changes in their products, as a reaction to a large cut in funding, the need to expand the market segment by attracting new customers and business, the change of the organization's current customer segment due to external conditions, (i.e. economy, aging, etc.), the urgent need for increasing productivity and efficiency, besides recruiting or leaving of large numbers of employees and managers. Some changes take place when the new "Leader" or CEO takes over the company and their personalities or thoughts start to change the organizational culture of the company (Lawrie, J. 1990; Ledez and Robert 2008; Allen et all 2015).

Ackerman, (1997) identifies "three types of change occurring in today’s organizations are development, transitional and transformational":

2- Development Change: concentrates on enhancing what the organization already has instead of creating new something related to work field or change the work plan.

2- Transitional Change: this type focuses on replacing what the organization already has with completely new something. The organization must release and let go of the old ways of how it used to operates, while the new ways adopted are put into place. (Lles and Sutherland, 2001).

3- Transformational Change: It requires a necessarily radical change in the main assumptions held by
those involved. The out coming organization from a Transformational Change will be different one in terms of structure, process, culture and strategy from its pre-metamorphic state. (Lles and Sutherland, 2001).

2.1. Change management

It is an approach to transform individuals, teams, and organizations from a current state to a new planned future state. Lorenzi, Riley identifies Change management /change control as "the process during which the implementation of changes of a system is done in a controlled manner by following a pre-defined framework with reasonable modifications" (Lorenzi, Riley, 2003). According to (Nickols,. 2002, p. 1) Change Management is "the art or science of making changes to a certain method or system in an orderly", systematic approach, to make sense out of the organizational chaos that the company is suffering, its employees, its suppliers and vendors and most important its customers. "A company must establish its strategic plans and set its operational goals, then choose KPIs" stated Allen et all (2015). Maximizing benefits, minimizing the risk of failure is the objective of any change management during the change implementation. Some of the revolutionary changes that encompass organizations today are: Globalization, localization, privatization, outsourcing, mergers and acquisitions, in addition to the rapid change in technology and increasing competition.

2.2. Risk

According to Forsdick 1997; the risk is "the probability that a particular adverse event occurs during a stated period of time or come as a result of a change". In other words it's a combination of the events and their probabilities of occurrence with a measure of the consequences of those events (Norman and Jansson 2004, Zhao et.al.2014). Also the ISO 9001:2015 standards states "that a risk is a combination of the probability of an event and its consequences". Risk is also defined as the uncertainty that can be found in a business and has either positive or negative consequences, positive ones are called opportunity while negative one is called risks (McNamee 1999, Safo'n and Escrina'-Esteve 2011). PMI (2000) defines risk as an uncertain event that if happens has a positive or negative effect. The objective of the risk management program is reducing risk systematically, and increasing the likelihood of meeting the desired project objectives. The project definition takes into account many risk management activities. The project definition establishes what will be the goals and constraints for the project. In this process it is critical to identify what the risks for the project are.

Risk Management

Risk management has become an integral part in project management field (Wideman 1992). It is defined by the PMI 2000, as the systematic process of identifying and responding to risks that may face a project. Through increasing the probabilities of positive events and minimize the negative ones. Risk management is a logical, consistent approach that helps to sense the upcoming uncertainties in order to allow us to carefully and productively avoiding the unnecessary waste of resources. It goes beyond faith and luck, "If
everything is a matter of luck, risk management is a meaningless exercise. Invoking luck obscures truth, because it separates an event from its cause" (Peter Bernstein in Risk Management Reports, 1999).

Risk management contains many steps that helps to find out the risk by identifying them, assess their effects, measure their possibilities of occurrence, then find a way to mitigate, or even exploit them (Garrett 1993; Kenzer 2001). One of the simple ways to identify risks is to perform WBS (Work breakdown structure), which make it easier to address risks on the process level (Aleshin 2001; Woods 2009). Risk identification and assessment should be an iterative process in the organization, and a responding actions should be put as a plan to face it. Four known actions to be taken to respond for a risk: Avoidance, Acceptance, Transference, or Mitigation. Those responding actions are common through many studies and standards (Wideman 1992, Garrett 1993, Kerzner 2001, Hillson 2002, Burke 2003, Gary and Larson 2003, Docter 2016).

Avoidance is taken when the risk is hardly to be accepted, and the risk conditions are to be eliminated. Acceptance or retention where a decision is made to see what will happen if the risk conditions continue, here there is a chance to exploit an opportunity. Transfer is a strategy that leads to transfer the risk responsibility for a third party such as insurance. Mitigation is about reducing the impact of the risk on organization work.

2.3. Risk and change in organizations

In order to increase its market share, and enhancing the quality of what it serves, and improving the performance and satisfactions of its team and customers, it should be able to make decisions that leads to such objectives, a critical decision that a company may make it to change its product or service to cover a wider range of market segment.

Recently risk management plan has emerged as one of the most important steps in gaining a sustained competitive advantage for any corporate (Lin and Zhou 2011), besides even the ISO 9001 is considering the risk management as an essential part of complying the standards of quality (PMI Institute). ERM (Enterprise Risk management) as a holistic view of risk management affects the performance of the corporate, thus affects its success through five factors that may lead the corporate to face risks which are (uncertainty of the environment (especially markets), competition, corporate size, complexity and its board of management) those factors can lead the corporate to make many changes to face risks that may arise due to any of them, especially the uncertainty and competition, for this corporates tend to have a hedging policies or implement ERM with the on-going processes taking into consideration the surrounding environment and the factors mentioned (Stulz 1996, Gordon et.al. 2009). Literature review related to ERM, the determinants of its implementation across companies and its relationship with performance, is rare. In contrast to the Collier et al. (2007) survey results, empirical evidence suggests that the appropriate ERM system may vary across firms.

A new paradigm of risk management has been seeking the risk as a consequence of change far away from the banking and financial sectors, this time the risk is studied as a consequence of product or service change. Many drivers for risks like technological changes, market needs may require or compel the corporate to
change the field it works either in changes its products or changing the services it offers; of course this will cause some wanted or unwanted events and uncertainty which enforces the corporate to adopt a good risk management plan to avoid or even mitigate the effect of the unwanted risks or maximize them if they are wanted or desired opportunities (Mahajan and Wind 1992; Lewis 2003; Zhao et.al.2014). To reduce the impact of risks that may arise during the development of a new product or service, or shifting from producing in a specific field to another; the corporate should measure the performance continuously (Ogawa and Piller 2006; Park 2008; park 2010). On the other hand an internal audit should be done to fix all errors or unexpected events that may affect the success of the company later (Angelova and Koleva 2015; Docter 2016).

3. Methodology

The research aims at assessing the risks that may arise as consequences for change, and study the plan of risk management in the contracting company selected.

For this purpose semi structured interviews were conducted, as mentioned earlier in the abstract, with the top management members who are responsible and involved in preparing and making the risk management plan for the company.

3.1. Research population and unit of analysis:

This is a case study for a Contracting Company, where the Unit of analysis is comprised of: Managing Director, HR director, Marketing Director, Operational Manager, Project controls and Planning Manager, and 2-3 Project Managers, in order to investigate the effect of change and the risks that may arise due to the change in this company which is specialized in industrial contracting such as Oil & Gas, Utilities, Cement and Mining.

In this research the questions of the interview were built after the researcher got a sense of the problem and started to explore and note the sides and effects of the problem, after building the questions accordingly; the Interviews questions were sent to experts and practitioners in the field of the study problem, to review it and give their feedback and comments. Also the informants’ comments and the observations that will help the researcher to analyze and interpret the views of the informants about the questions.

4. Results and findings

4.1. Characteristics of the sample

The targeted sample was comprised of: (Business Development manager, HR director, Managing Director, Operational Manager, Supply chain Manager, financial Manager, Project controls and planning manager, and 2 project managers).
The results shows that there were one female and 8 males holding the positions mentioned. The experience years of the informants were between 16 and 35 years which indicates that they have fairly good knowledge base and experience in the field. According to the age the interviews shown that most of the managers are aging between (35-60), which indicates that the positions are occupied, mostly by Early to middle adulthood persons. In summary we can say the sample shown respondents are 60 years old or younger, bachelor or higher educational degrees, and having experience with at least 16 years in the field.

**The Relative Importance of interview questions**

<table>
<thead>
<tr>
<th>Interview questions</th>
<th>Mean</th>
<th>Std. dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the importance of having a risk management plan for your company?</td>
<td>4.00</td>
<td>1.01</td>
</tr>
<tr>
<td>What are the main drivers that lead the company to change its processes, products or services</td>
<td>4.07</td>
<td>0.97</td>
</tr>
<tr>
<td>What are the most significant risks the company may face when changing to another product or service?</td>
<td>4.43</td>
<td>1.42</td>
</tr>
<tr>
<td>Do you think that such change may threat the existence of the company and leads to it failure?</td>
<td>4.01</td>
<td>0.78</td>
</tr>
<tr>
<td>Does the new change require new skills? And new hierarchy?</td>
<td>4.93</td>
<td>1.30</td>
</tr>
<tr>
<td>What are the most environmental factors that may cause risks for the company?</td>
<td>4.89</td>
<td>0.03</td>
</tr>
<tr>
<td>To what extent may the change affect the reputation of the company?</td>
<td>4.93</td>
<td>0.24</td>
</tr>
<tr>
<td>What is the best strategy the company may adopt to face the risks of change in products or services?</td>
<td>5.14</td>
<td>1.00</td>
</tr>
<tr>
<td>Studying the market before making change is critical and important, how would a severe analysis help the company to avoid the danger of the risks that may face the company due to any change it adopts?</td>
<td>4.79</td>
<td>0.56</td>
</tr>
<tr>
<td>Natural risks are uncontrolled conditions, what is the best approach in your opinion to face them?</td>
<td>4.21</td>
<td>0.98</td>
</tr>
<tr>
<td>How the company determined the severity and probability of each risk?</td>
<td>4.13</td>
<td>0.69</td>
</tr>
</tbody>
</table>

The results showed that the degree of influence for the issues that the questions measure in this study is relatively positive, since the means almost for all variables were higher than 3 and their standard deviations were lower than 1.

**4.2. Inferential Results**
The interview questions which were validated and reviewed by the experts in the field and academic members in business and management, the following is the analysis results for the questions of the interviews:

**Q1: What is the importance of having a risk management plan for your company?**

All of the informants agreed that having a risk management plan is a must, their views were all speaking about the importance of having a risk plan; for it helps in avoiding environmental impacts and any failure, providing the company with an effective plan to avoid losses, helps to make a better business strategy, eliminate and minimize the degree of hesitation in decision making, planning for a better output and overcome any risk with a contingency plan, and enhancing opportunities. Therefore the managing director stated that planning for risks is a continuous activity that the company should always do, in order to gain a competitive advantage.

**Q2: What are the main drivers that lead the company to change its processes, products or services?**

The interviewed managers stated that the main drivers that lead the company to change its processes, products or services are mainly but not restricted to: the demand of the markets, requirements of customers, maintain a competitive advantage, international situations that controls the markets, policies and regulations, political situations in the area of the study, increasing profits and gain customers satisfaction. The mentioned reasons will be stated as the drivers for change in the case of this study and its targeted sample, as the answers of the interviewed managers revealed.

**Q3: What are the most significant risks the company may face when changing to another product or service?**

**Q4: Do you think that such change may threat the existence of the company and leads to it failure.**

While for measuring risks and their impact on the company, the managers first mentioned the most significant risks that may face the company due to change its products or services, most of them focused on losing the original core of expertise, risks of establishing new clients, matching the financial resources with the new change requirements, also the skills already exists, consumer switching costs, the set-up compatibility with the new service or products, marketing the new products or services, internal resistance, rigidity of organizational culture. The managers' attitudes showed that they think that change in products and services may cause the failure of the company if not controlled in the right way.

**Q5: Does the new change require new skills? And new hierarchy?**

The responses showed that any change mostly requires new skills and new hierarchy, here we can find a problem in the experience existed, and a conflict with the new needs of the change happening, this may cause a risk that arise due to changing the staff working, or losing the loyalty of some experts if they got a sense that their experience and skills are no longer useful for the company, while the company still needs them!, a training sessions related to the new change will be a solution for such issue, the managing director's perspective showed. On the other hand a need for new skills related to the change issues and a new hierarchy is not a must said the business development manager, he says this will depends on the domain of change, it may still fall in the area of the skills and experience existed. Other point of views
stated that a new strategy is needed more than new skills and hierarchy, in which they didn’t show any fears of risks or results from this side.

**Q6: What are the most environmental factors that may cause risks for the company?**

The environmental factors that may cause risks for the company as stated by the interviewed managers are mostly: Clients are not committed to pay their payments, political issues, oil prices affecting the economy, environmental regulations, contaminants and hazards like wars and storms..etc. Here we should mention that not only these factors may cause the company to face risks, but in the case of this study we are taking them into account because they speak about the situations or possible scenarios that the targeted company may face.

**Q7: To what extent may the change affect the reputation of the company?**

**Q8: What is the best strategy the company may adopt to face the risks of change in products or services?**

In the case of this study company, managers showed fears of change and its effect on the reputation of the company, some of them stated that if not properly studied and a good plan implemented to face the risks of the change, such step may threat the company and cause it to fall. Some said it may lead to enrich the reputation of the company taking into consideration the customer satisfaction about the new product or service, in general they all showed a since of responsibility towards a credible risk plan in the case of any adopted change. Having a good contingency plan and backup actions register (corrective and preventive) to face any unexpected consequence for the change adopted by the company, besides using the transfer strategy and mitigating risks were the most used and considered the best strategies from the managers' perspectives.

**Q9: Studying the market before making change is critical and important, how would a severe analysis help the company to avoid the danger of the risks that may face the company due to any change it adopts?**

The interviews results showed that it's very important to conduct a deep and make a severe analysis for the market situations and conditions, to avoid the market segmentation requirements risks or threats if the change is adopted, thus the change strategy will take into consideration the market needs and customers especially the segment that the company serves so minimizing any risks may arise from the targeted markets.

**Q10: Natural risks are uncontrolled conditions, what is the best approach in your opinion to face them?**

In the case of risks that are consequences of natural hazards; mitigating is the best strategy, and a good study of the nature conditions in the area to make alternatives as possible as the company can.

**Q11: How the company determined the severity and probability of each risk.**

The severity and probability of risks are determined in the targeted company by many factors, such as time of risk and durations, calculating the impact and probability, or make brainstorming sessions for the managers and concerned members to find out the best measurement for the risks and priorities them and make risk register to set a clear strategy and risk management plan accordingly. Documentation is an
essential thing to do, where the company risk register shows the list of the risks that the company has passed and to overcome them, also the expected. In the beginning of each interview this question was asked: "To What extent do you think that the subject of this study is important?"

The interviewer which is the researcher himself of this study has taken the perspectives and attitudes about the importance of this study, in each interview, and the answers showed that this study is very important since it focuses on a side of change other than the financial one, and the perspectives showed that the importance of this lies in many points, where it studies the market change since markets never stay the same, and trends where moved to concentrate on the resistance of change as a main risk internally, the need to change current skills and experience, although some of the interviewed managers stated that the company cannot leave its core business to move to completely new field, concerning external threats the company should seek the risks that comes from outside the company environment such as clients and market needs, also studying the main reasons that may lead the company and force it to adopt change.

5. Conclusions and recommendations

The main objective of this study was to assess the risk of corporate strategic change. For this purpose a contracting company specialized in industrial process fabrication & installation, was chosen and its top management members were interviewed, where the interviewed managers mostly have experience of not less than 16 years in the field.

The findings imply that risk management should be considered as a creative and iterative approach with continuous feedback resulting from its continuous implementation, reviewing and modification. Managers have considered risk management as an integral part of the business plan and adopting change is necessary due to the rapid changes in environment and customers' needs, and markets. Thus, the need for taking a contingency risk plan is necessary for any risk that may come as a result of change adopted.

On the other hand, losing the original core of expertise, risks of establishing new clients, matching the financial resources with the new change requirements were the core of the risks that managers mentioned they expect to face in any case of change in products or services.

Finally, according to what the results showed and what the literature explored, it is obvious now that any change the company is choosing or forced to adopt should be accompanied with risk that explains the most significant and expected risks that may come as a result or consequence of the change, and a plan to face them either mitigate, avoid or exploit any chance available in the face of risk, thus keeping a sustained competitive advantage.

5.1. Recommendations

In the case of this study; it is recommended to propose a risk program to enable managers in the company to identify risks as they arise and expect what can be expected, rank and prioritize them in order to direct the available resources towards the important risks. The ranking could be used through calculating the probability and impact of each risk.
Another recommendation the researcher suggests is to adopt new analysis tools and techniques that may help to save time, cost and efforts, since it can minimize the threat of a risk if previously expected and the way to avoid or mitigate which is already set.

Change is not always an option, sometimes it’s a must, and thus risk management planning should be a culture that has to be spread all over the company, it is recommended that top management should give training sessions to its members especially who are already specialized in risks issues, to enhance their ability to predict risks and set plans to face them.

The results of this study can be used to find new trend in adopting risk management tools and planning in any strategic plan for change. In the targeted company the reaction for the study purpose was positive, since the company is in implementing a strategic plan of change, and yet it tries to minimize any risk will arise, the company is changing from being a specialized company in process skids fabrication and installation that was responsible to handle parts of projects in the industry, to be an EPC (Engineering, procurement and construction) contracting company that handles the project from A to Z, which means it has been changing its products and services performed, some of the risks were predicted before and plans were set to face them, but the plan for upcoming and risen risks is not clear enough since new risks are emerging due to the dynamicity of the environment.

6. References


Services Institute. In association with the George Washington university, Washington DC.


7. Appendix 1

In this study context, the Top management of the company were interviewed: The Business Development manager, HR director, Managing Director, Operational Manager, Supply chain Manager, financial Manager, Project controls and planning manager, and two project managers.

The following are the questions of the Interviews. After validating them by: practitioners, and academic professors in the field.

1- What is the importance of having a risk management plan for your company?
2- What are the main drivers that lead the company to change its processes, products or services?
3- What are the most significant risks the company may face when changing to another product or service?
4- Do you think that such change may threat the existence of the company and leads to it failure?
5- Does the new change require new skills? And new hierarchy?
6- What are the most environmental factors that may cause risks for the company?
7- To what extent may the change affect the reputation of the company?
8- What is the best strategy the company may adopt to face the risks of change in products or services?
9- Studying the market before making change is critical and important, how would a severe analysis help the company to avoid the danger of the risks that may face the company due to any change it adopts?
10- Natural risks are uncontrolled conditions, what is the best approach in your opinion to face them?
11- While the company had changed its services and products when it became offering full solutions as an EPC contractor; what were the expected risks.
VALUE CHAIN OPERATIONAL INTELLIGENCE CLUSTERS

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Abstract
Value chain is a well known management model for improving business competitiveness. As value chain facilitates meaningful grouping of business processes, operational intelligence based on value chain encompasses a wider scope for analytics. One approach for performing value chain operational intelligence is through the concept of analytic clusters. Analytic clusters are essentially a way to group critical business process information together such that it enables value activity to achieve success with respect to some measure. This paper outlines an approach to develop such analytics clusters through a University value chain prototype which is implemented in Oracle’s PL/SQL language.

Keywords: Business Intelligence, Operational Intelligence, Value Chain, Business Process, Oracle, PL/SQL.

Introduction

Business intelligence (BI) is a collection of concepts and techniques that provide insight into business operations and competitive environment (Cody et. al, 2002; Dayal et. al, 2009; Kimball and Ross, 2010; Olszak and Ziemba, 2007; Sharda et. al, 2013). Even though BI has gained a lot of attention in the context of discovering emerging business opportunities (Chen et. al, 2012; Olivia, 2009; Watson and Wixom 2007), the utilization of its concepts to enhance business processes through operational intelligence is evolving (Elbashira et. al, 2008; Golfarelli et. al, 2004; Kaula, 2012; Marjanovic, 2007; Marjanovic, 2010). As an organization is a collection of business processes, improving business process performance through operational intelligence is essential for it to achieve its business objectives, besides facilitating competitive advantage.

Generally BI generates insight through modeling of business information and performing analytics through a data warehouse in the form of star schema or its variants (Agrawal et. al, 1997; Kimball and Ross, 2002; Kimball et. al, 2008; Sen and Sinha, 2005; Wrembel and Koncilia, 2007). Modeling of the data warehouse schema is accomplished through analysis of business operations (Ponniah, 2010)
involving business activities or a business process. Now even though modeling of information for star schema is important as it allows an organization to make sense of data and generate the insight that is useful and relevant to the business process, such modeling is essentially a snapshot on some factors of a business process.

An alternative approach can be to develop clusters of information needed for business performance success with respect to some performance criteria. Such clusters can be referred as analytic clusters. Analytic clusters can then provide the information that can enable a business processes to achieve success with respect to some measure. Such an assessment provides a business with a more timely understanding of how the business process is performing.

Given the multitudes of business processes utilized by an organization, it is better to group business processes for operational intelligence. Such grouping facilitates consideration of a broader set of analytic information for business performance success. In this context the value chain model provides an appropriate model that aligns business processes with business goals for analytics and value generation.

Value chain is a management model for improving business competitiveness (Barnes, 2001; Porter, 1979; Porter, 1985; Porter, 2008). Since the model sequences the primary and support activities to support business operations, it also provides fluidity in business operations from an analytical standpoint. A value chain based analytic approach facilitates meaningful grouping of business processes such that appropriate value from business operations can be derived. An analytic clusters approach for value chain model activity is shown in Figure 1. It is possible for a value chain activity to have many clusters based on different success measures.

![Fig. 1 Analytic Clusters for Value Chain Model](image)

There have been attempts toward analysis of business operations in the form of process monitoring.
process analysis, process discovery, conformance checking, prediction and optimizations (Castellanos et. al., 2009; Grigori et. al, 2004). Besides, there have also been utilization of business rules for business process intelligence (Arigliano et. al, 2008; Debevoise, 2005; Kaula, 2012; Mircea and Andreescu, 2009). These approaches either tie business rules to measures that are defined a priori through existing policies without much emphasis on database analysis or outline business rules for specific performance metrics.

This paper outlines an approach to develop analytic clusters for operational intelligence through the value chain model. Since each value chain activity is a collection of business processes, analytic clusters for each value activity can be derived through a multidimensional model like star schema. The paper illustrates the concept through a prototype of a University value chain. Review of business process based operational intelligence is outlined now. Value chain concepts are outlined next from the perspective of process based operational intelligence, followed by a prototype of analytic clusters based on University value chain.

Review of Process based Operational Intelligence

Business process intelligence analyzes business processes to ensure that their operational efficiency is consistent with their stated objectives. The goal is to optimize such processes for competitive performance. There have been three approaches towards utilization of BI towards business process based operational analytics. All three approaches focus on individual business process operations instead of ensuring or determining their value metrics from the perspective of a business value chain.

The first approach focuses on (i) using BI concepts toward dynamic process performance evaluation (Castellanos et. al., 2005; Kaula, 2012; Tan et. al, 2008), or (ii) analyze event logs to improve the quality of business processes (Aalst et al., 2007), or (iii) monitor process instances to inform users about unusual or undesired situations (Grigori et al., 2004). These approaches apply BI to individual business processes along with providing analytics associated with business process activities.

The second approach emphasizes analytics with selected business process activities within the modeling process (Bucher et. al, 2009). It shows reference to analytic information during business process modeling as a way to incorporate BI. The approach is short on implementation details on how to perform analytics.

The third approach focuses on utilizing BI to reduce redundant specifications of recurrent business functions when modeling business processes (Thom et. al, 2008). It fosters reuse of business function specifications and helps to improve the quality and comparability of business process models. This approach is not focused on performance metrics but rather on the modeling process.

Value Chain for Operational Intelligence
A value chain (shown in Figure 2) is a chain of activities that a firm operating in a specific industry performs in order to deliver a valuable product or service to the market (Porter, 1985; Porter, 2008). It represents all activities that a business undertakes to make a product or service from its conception to its end use and beyond. Value chains can be split into primary value activities and support value activities. Each value chain activity is a collection of business processes. For instance one of the primary value activity in a manufacturing business is inbound logistics. Inbound logistics may consist of business processes such as inventory management and inbound freight logistics.

![Fig. 2 Value Chain Model](image)

Value chains are utilized to improve business competitiveness by determining the value of each activity toward business success. The two common methods of determining value are cost and differentiation. However, from a business intelligence perspective an alternative mechanism for determining value can be performance metrics that provides a measure of a value activity’s success and value.

As a value chain model is based on the process view of an organization, the data generated by business processes within a value activity can be analyzed to identify the performance measure for the overall activity, and accordingly develop performance metrics to determine the value for such activity. For instance, inbound logistics that involves relationships with suppliers and includes all the activities required to receive, store, and disseminate raw materials or product inputs includes business processes like inbound freight logistics, procure to pay, and so on. Once the dimensional data and performance measures for determining the value of inbound logistics is identified, a multidimensional model star schema can be developed to facilitate such analytics.

**University Value Chain Model for Operational Intelligence**

To illustrate the concept of utilizing value chain model for operational intelligence, a generic University value chain model is outlined in Figure 3. The diagram only focuses on some of the student related primary value activities.
In the figure “Inbound Students” pertains to activities associated with the recruitment of prospective students by the University. It includes processing of student applications. “Course Operations” includes all activities ranging from course registration, advising to student graduation. “Outbound Students” refers to University activities that facilitate companies to visit campus to interview and offer jobs to graduating students. “Marketing” are the efforts the University undertakes to promote their programs. “Services” are supplementary activities like financial aid, residence hall living, or computing support that facilitate proper living and timely graduation of students.

As each activity is a collection of business processes, a business process specific value chain model is shown in Figure 4. In the figure, Inbound Students contains business processes like Campus Recruitment, Campus Visit, Student Orientation and Student Admission. The business processes in Course Operations range from Registration to Student Graduation. Outbound Students business processes range from Job Workshop to Career Placement. Marketing contains business processes like College Fairs and Advertising Campaign. These business process pertain to the marketing of campus degree and diplomas. Services contains business processes pertaining to cashier services, residence life, financial aid, and technology support.

The business processes within a value activity are often sequenced in their operations as shown in Figure 5. For instance, in the figure, business process sequence for Inbound Students, Course Operations, and Outbound Students value activities are shown. In general such logical arrangements facilitate understanding of the workflow sequence within a value activity.
Value chains can assist in the development of analytic clusters as a way to assess whether the value chain activities are aligned with business objectives. To accomplish the development of analytic clusters (i) dimensional modeling on the group of business processes within a value chain activity in the form of star schema is performed, (ii) followed by the transformation of star schema into relevant analytic clusters, and (iii) finally reference the value chain model to set analytic triggers based on analytic clusters to ensure the success of value chain activity.

**Star Schema Prototype for Value Chain Activity**

To ensure that primary value activities are achieving their value and success, one can develop a star schema for each such value activity. So for example, Inbound Students value activity value can be enhanced or have more value if more students get accepted. The higher the student acceptance, the better the overall success of the Inbound Students value activity. So instead of determining what factors contribute to a specific student acceptance count for value activity optimum success, an alternative approach could be to determine the impact of certain dimensional factors towards student acceptance. This approach utilizes appropriate or relevant dimensions from the business processes within Inbound Students. Figure 6 shows some of the dimension entities associated with the business processes within Inbound Students value activity.
These dimension entities are then assembled in a star schema as shown in Figure 7 with performance measure on student acceptance count. Unlike the traditional star schema where the dimensions are tables with associated attributes, the star schema for analytic clusters will have dimension entities/tables with single attribute. Since the purpose of analytic cluster is to provide the impact of individual information on performance measure, the resulting dimensions should be structured with single attribute. Such dimensional structuring also provides the impact of the attribute within the scope and context of value activity. As multi-dimensional analysis is often time based, time dimension is also added to the schema.

The analysis of student acceptance count analytic clusters will show the factors that contribute to an improvement in student acceptance over time with regard to Inbound Students activity. The relationship among the dimension attributes defines the value driven analytic cluster. The dimensions structure is not hierarchical. The table structure with sample data for the above dimensions and fact measures are listed from Table 1 through Table 8 as follows:
Table 1. APPLICATION HIGH SCHOOL

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<tr>
<td>2</td>
<td>Kickapoo High</td>
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<tr>
<td>3</td>
<td>Lincoln High</td>
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<td>4</td>
<td>Shawnee Mission</td>
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Table 2. APPLICATION ACT

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Table 3. APPLICATION GPA

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<td>3</td>
<td>Career Service</td>
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<td>4</td>
<td>Campus Tour</td>
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<td>Online Tour</td>
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### Table 5. RECRUIT TRIP EVENTS

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<td>Kickapoo High</td>
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<td>MSU Career Fest</td>
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### Table 6. TIME DIM

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Transform Star Schema into Analytic Clusters

Once the star schema is queried, the specific dimension data elements (or factors) that affect student acceptance can be identified. The relationship of these dimension data elements (or factors) with fact measure is then expressed in the form of analytic cluster. The logic of developing analytic cluster based on star schema query is shown in Figure 8.

![Fig. 8 Analytic Cluster Logic](image_url)

The logic is implemented through a PL/SQL database procedure. The implementation is PC based. Key features of the logic are as follows:
1. SQL query (part of logic step 1) is developed. For example, the following query lists dimension attributes associated with count of students accepted.

```sql
select app_hs.high_school, app_act.act, app_gpa.gpa, campus_visit_sname.session_name, recruit_trip.event_name, time_dim.semester, acceptance_count.accept_no
from acceptance_count, app_act, app_gpa, app_hs, campus_visit_sname, recruit_trip, time_dim
where app_act.app_act_id = acceptance_count.app_act_id and app_gpa.app_gpa_id = acceptance_count.app_gpa_id and app_hs.app_hs_id = acceptance_count.app_hs_id and campus_visit_sname.visit_id = acceptance_count.visit_id and recruit_trip.recruit_id = acceptance_count.recruit_id and time_dim.time_dim_id = acceptance_count.time_dim_id and accept_no > 60;
```

2. Once the queries are executed, the procedure counts the instances of each attribute in the query; if the count for an attribute is more than 50% then that attribute does have strong influence over the metric measure (part of logic steps 2 through 4).
3. List each attribute value that has high count to become part of the analytic cluster (part of logic step 5).

The dimension data element factors that influence high student acceptance depends on many key information. Figure 9 shows an instances of an analytic cluster that influences student acceptance greater than 60. The analytic cluster in the diagram emphasizes that inbound student value activity with respect to success criteria of high student acceptance involves more of the information pertaining to Act scores between 28-30, application GPA ranging between 2.6 to 2.9, overview session attended by prospective students, and students enrolling in Fall semester. So now the University can focus on these factors to further improve student acceptance, besides working on improving other information to further enhance acceptance count.
Conclusions

The value chain model of an organization can be a meaningful way to facilitate analysis of business processes and operational intelligence. As business intelligence focuses on improving decision making within an organization, presenting actionable information to the right people at the right time improves the quality and timeliness of decisions with respect to the value chain activity. A key aspect of value chain analytics is the alignment of performance based on clusters of information to ensure success across a group of business processes.

Even though operational intelligence is generally associated with individual business processes, the paper shows value chains provide an alternative approach to gain insight into successful business operations. Further research is underway to (i) develop more complex analytic clusters, (ii) explore association of analytic clusters with value chain activity transactional working, and (iii) develop dimensional model that incorporate business process sequence for cluster specification.

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EU CONVERGENCE, STRUCTURAL ADJUSTMENTS AND GROWTH: IS SEE6 CATCHING UP?

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Abstract

During the past decade, ten new EU member states reached a high degree of market integration and macroeconomic stabilization as part of their accession process. The main challenge for these countries is to deal with large and potential volatile capital inflows and to achieve nominal convergence needed for adopting the euro. These challenges must be addressed within the scope of the limited fiscal policy. In the context of macroeconomic adjustment, macro-fiscal policies will be in the focus of macroeconomic policies in the years that follow.

They need to focus on meeting the requirements for sustainability of EMU, and to assist in absorbing the effects of aggregate demand of large capital inflows. So in terms of macroeconomic convergence for SEE6 countries and the case of Macedonia, EU membership requires convergence of the Macedonian economy with that of the EU in realistic conditions, indicating income per capita and economic structure, and in nominal terms, meaning convergence of prices, inflation and interest rates.1

Keywords: European Union, EU convergence, EU accession, SEE6, Macedonia, economic growth, exchange rate regime, euro

1. INTRODUCTION

1 SEE6 countries are: Macedonia, Serbia, Bosnia and Herzegovina, Montenegro, Kosovo, Albania
According to literature, the macroeconomic policy of the new EU member states is facing two main challenges. The first is to manage the continued and rapid process of future real economic convergence, which will come with high real GDP and productivity growth rates, and large capital inflows. The second challenge is to achieve the degree of nominal convergence required to enter into European Monetary Union (EMU). These two challenges are not unrelated, such as rapid growth and large capital inflows can overburden realizing of nominal convergence, i.e., there are good reasons to assume that the real convergence would be easier to manage in some countries, if they were allowed to adopt the euro immediately. Both challenges are mainly associated with fiscal policy: managing capital inflows- because fiscal policy can absorb some of their demand effects, and nominal convergence- because the sustainability of public finances is part of the requirements for entering EMU.

2. MACROECONOMIC CHALLENGES FOR COUNTRIES OF SOUTH-EASTERN EUROPE

A survey provides an interesting overview of progress with real and nominal convergence in Central and South-Eastern Europe and the macroeconomic challenges that they face on their path to the EU (Schadler et al., 2005). Namely, referring to the macroeconomic stability and progress in transition both are closely related and both are important for sustainable growth and progress towards a functioning market economy. Progress with structural reforms can help for macroeconomic stability, for example, by reducing the structural external deficits. Also it helps the nominal convergence, as the productivity realizes the improvement of competitiveness and helps disinflation by maintaining low unit cost. In a study describing experiences about the development in the newest EU members, Fidrmuc shows that the development in
more successful transition countries reflects higher total factor of productivity than the growth in relative levels of capital and labor (Fidrmuc, 2004). This underlines the importance of market-established reforms for development. Various indicators show that the most of the Southeastern countries require continual progress in transition reforms to become functional market economies. In regards to structural reforms, if they remain slow, positive growth rates seen in the last five years in many South-eastern European countries may not be sustainable. This would slow down real convergence. Initial reforms-like trade and price liberalization, privatization in many countries, and relative macroeconomic stability-facilitated lessened development since 2000 in many countries in the region.

3. IS THE REAL EXCHANGE RATE A POLICY VARIABLE?

Like many countries in the early stages of transition, South-eastern European countries rely mainly on exchange rates to reduce the inflation. In many countries, exchange rate helps to reduce the inflation to lower single digits since 2004. Albania’s managed float and informal inflation targeting were also successful in keeping inflation low, while in Romania, inflation, although declining under the managed float, remains close to double digits. Since 2000 Serbia has shifted between nominal and close to real exchange rate targeting (with important regime shifts in early 2003 and 2005) (De Grauwe and Schnabl, 2004). Inflation first declined with the exchange rate anchor, but an increasing external deficit prompted a shift to a managed float in 2003. However, inflation resurged, as suppressed administrative prices were readjusted and growing euroization contributed to an increased pass-through from the exchange rate to prices. The regime shifts may also have adversely affected monetary policy credibility, as indicated by the
growing euroization. The exchange rate anchors and sluggish structural reform put pressure on competitiveness. Fixed or nearly fixed exchange rates can lead to unsustainable real appreciation and loss of competitiveness, unless fiscal and incomes policies remain tight and structural reforms boost productivity. For example, in Serbia, the exchange rate anchor in 2002 became unsustainable as large real wage increases and slow structural reforms eroded competitiveness and increased the external deficit. Pressures for real appreciation in the region also arise from the large inflows of foreign currency. The evolution of EU export market shares also suggests that Macedonia may have lost competitiveness, while most others have increased their share in the EU market. The real effective exchange rates data (REER) show a large appreciation in Bulgaria, Romania, and Albania in recent years, which at least in the former two is likely to reflect changes in market fundamentals in terms of increased productivity. In the remainder of the SEE, there is no clear trend with real appreciation and the REERs have remained relatively flat in the past few years.

South-eastern Europe can draw experience from recent new EU member states with monetary framework during accession. Exchange rate regimes during accession had shown different variations, which indicate the importance of fundamentals and associated policies in the implementation and achievement of macroeconomic stability (Schadler et al., 2005). Some of the largest recent EU members gradually moved from exchange-rate-based stabilizations to more flexible monetary policy as transition progressed. South-eastern Europe has much lower speed of reforms and lower growth rates. Related to this, capital inflows to the region are much smaller and have shown greater dispersion between countries. Regardless the exchange rate regime, the appreciation of the real exchange rate among countries in the
region is significant, although it is slightly lower when compared to countries in the EU member states. As a result, these countries suffer from loss of competitiveness. This can be clearly seen from the movements of the deficit on their current account, which are important in all these countries. For example, the current account deficit in 2007 ranged from 3.1% of GDP in Macedonia to 36.2% of GDP in Montenegro (European Commission, 2007). Using the exchange rate as well as the inflationary expectations has been effective so far, producing a low and stable inflation rates. In terms of high import dependence and the relatively slow implementation of structural reforms realized in increased export potential, contributed to the importance of high trade deficit, which was largely financed by high private transfers (Dauti and Pollozhani, 2008).

4. ANALYSIS: MACEDONIA’S FULFILLMENT OF ECONOMIC CRITERIA: CURRENT SITUATION

The EU agenda remains strategic priority for Macedonia. To cope with competitive pressures and market forces within the Union in the medium-term, the country needs to address important challenges through determined implementation of structural reforms. The economic recovery continued to progress, but it remains narrowly based on the external sector, and has had limited impact on unemployment which remains high especially among young people. Financial stability was preserved and FDI inflows increased. Fiscal discipline as well as transparency and quality of government spending deteriorated. Prospects for growth and employment depend largely on the business environment of the domestic private sector. A better alignment of workers’ skills with labour demand needs to be tackled through
further reforms of the education system, including the implementation of the vocation training strategy. Regarding public finances, the renewed deterioration of fiscal discipline in 2013 and 2014 calls for improved budget planning procedures and better consistency of annual budget execution with the medium-term fiscal strategy (Sedelmeier, 2006). The quality of public spending should be improved, by shifting the composition of capital expenditure towards growth-enhancing investment. Monetary policy remained successful in defending the currency peg. The inflation environment remained benign, creating room for monetary policy to stimulate sluggish credit growth. The increase in the consumer price index (CPI) averaged 2.8% in 2013, down by about 0.5 percentage points since 2012 and fell further in spring 2014, mainly due to declining prices for food and housing and utilities (NBRM, 2014).

5. DISCUSSION: MACEDONIA'S CHALLENGES TO EU ACCESSION

The performances of the real convergence of Macedonia lag seriously compared with the new member states. Although GDP growth is accelerating in Macedonia in the past few years, in comparative perspective Macedonian inability to maintain rapid convergence of GDP per capita with EU countries, is a source of concern (Holtemoller, 2005). Given low Macedonian GDP per capita, realizing real convergence in per capita income is increasingly important matter. Macedonia has suffered from regional instability and domestic disturbances, as other new members also faced with economic and financial crises (Bisev and Petkovski, 2003). The growth of capital stock is a key component of real convergence to new Member States, because the ratio of investment to GDP is higher in most of those new member states, which ranges between 35% and 25% of GDP.
The investment rate of Macedonia is on average less than 20% of GDP, which made the per capita income convergence with the EU impossible, through the growth of the capital stock. If Macedonia isn’t able to increase the share of GDP and to devote at fixed capital formation over 25%, will be forced on fully devoting for productive gains, thus to be with the level of income per capita of other EU Member States.

As of reports about economic policy it is clear that In January 2014, the authorities submitted the eighth Pre-accession Economic Programme (PEP), outlining key economic, fiscal and structural reforms for the period 2014-2016. Its macroeconomic and fiscal framework is somewhat optimistic with gradually increasing growth averaging close to 4 %, driven by domestic demand, and a gradual reduction in the general government deficit ratio to 2.6 % in 2016. Further efforts will be needed to improve the business environment, in particular market exit procedures and access to finance. The political consensus on the fundamentals of a market economy was maintained, but economic policy and public expenditure management remain driven by ad hoc concerns rather than the long-term requirements of the economy.

Analyzing macroeconomic stability, the current account deficit narrowed in 2013 to 1.8 % of GDP, as the merchandise trade balance improved in spite of a drop in current transfers. In the same period, foreign direct investment (FDI) inflows strengthened– in 2013, they accounted for 3.5 % of GDP, and stayed at the same level in the first half of 2014. In 2015 pick-up in export activity is expected, when the new capacities are taking up operations. Output growth needs to be more broadly based, and external imbalances are likely to widen again temporarily in view of investment-related imports. It is important to mention that many of the larger rates of the capital formation in the new member states is due to high
levels of corporate savings and capital inflows, mainly in the form of FDI rather than result of high
domestic personal savings. Thus, the low level of FDI in Macedonia is a reason for short-term decline in
capital formation. Another barrier for investment - which carry growth - is domestic "investment deficit",
which is mainly due to poor profitability and savings as the investment behavior of Macedonian
companies too. Thus, the overcoming the low propensity for investing by the Macedonian firms is
particularly important for real convergence (Habermas, 2012). Macedonia differs from the new Member
States not only because of its low level of capital formation but because of its different dynamics of total
factor productivity as well. Because of the capital accumulation in Macedonia some minor contributions
for development were required, such as changes in employment and in total factor productivity growth,
which were the main driver of GDP growth as well, from one year to another. To formulate effective
policy it is necessary to research the growth of total factor productivity in Macedonia, as well as the
causes of low business investment. The other elements of the structural convergence are the movement of
labor and economic activities, generally from agriculture to industry and services. In all transition
economies this structural change is an ongoing process and it is a part of the international routes where all
countries experience a shift in economic activity from agriculture to manufacturing and then from
agriculture and manufacturing to the services, as the income per capita is increasing (Edwards, 1998).
Labour market conditions improved marginally, but remained challenging. The unemployment rate fell
gradually, to 28.2 % in the second quarter of 2014, from an average of 29 % in 2013. Reforms to tackle
the structural rigidities of the labour market have made only limited progress. The employability of
workers should be improved through structural measures as well as through better targeting of the active labour market measures (Joseph and Hitchner, 2008).

Macedonian industrial value of added share is declining faster than in the case of new Member States, and in Macedonia’s case, this structural change occurs with small convergence in per capita income. EU Membership can improve the industrial situation in Macedonia only if the access largely makes Macedonia a location from which foreign investors can serve the EU market if the domestic industry, with the help of FDI can take the necessary change for its output, an issue explored in greater detail in the section of the industry.

6. PERSPECTIVES: ECONOMIC CONVERGENCE MACHINE IN SEE6

The main goal of National Bank of Republic of Macedonia is the maintenance of the price stability. In this manner the National Bank is committed to applying a strategy for maintaining stable nominal exchange rate against the Euro. The role of the exchange rate as a nominal anchor derives from the characteristics of the domestic economy, as a small and open economy that is highly dependent on the import of primary commodities (European Commission, 2007). Also, Macedonian exchange rate can be used as an instrument for export performances of the country.

Macedonian policymakers should create policy with several aims focused on exchange rate policy because:

• A competitive real exchange rate provides an incentive for exports
• The impact of exchange rates on trade should be seen in the context of continued integration of supply chains.

• Exports generally include high import content and impact of foreign currency-exchange appreciation or depreciation on any finished product because it is complex. If the depreciation of the exchange rate makes its exports of finished products "cheaper", it makes imported components "expensive" for domestic producers.

• Maintaining growth and reducing the unemployment in a small and open economy such as Macedonia depends from improved performance of exports.

• Improving the performance of exports can help to preserve macroeconomic stability by closing the gap in the current account to avoid wasting supplies and to stop the growth of external debt.

• Improving performance requires improving export competitiveness.

• An outward oriented, market-friendly trade regime, which emphasizes the dismantling of import controls and tariffs (permitting access to inputs at world prices), and streamlined bureaucratic procedures, i.e. export and import procedures, modern customs administration and efficient value added tax administration will facilitate exports, including from SMEs.

Given the high openness of the economy, the risks to the projected growth continued to result from the global environment and developments in the external environment. By the end of 2015, the credit growth was projected to accelerate and it reached 8.5%. Despite the moderate deterioration on the current account, it is estimated that its negative balance is fully financed by capital inflows, mainly coming from foreign
direct investment and external borrowings for infrastructure projects. In 2015 the foreign direct was gradually increased about 4.5% of GDP, respectively. The fiscal policy is important factor that influence the monetary policy setup, while the adequate coordination of these policies is crucial for creation and maintenance of the macroeconomic stability. After the risen level in 2013, the budget deficit fall gradually and it ranged about 3% of GDP on a medium run.

SEE6 growth in 2015 accelerated to 2.6 percent on average. All six SEE economies are expected to contribute to the increase in growth rates as external demand firms up and domestic demand begins to recover. Albania, Bosnia and Herzegovina, Kosovo and Serbia had higher or the same growth in 2015 than in 2014. In 2015, SEE6 economies grew slightly slower than the average for the EU11 countries (2.6 percent compared to 2.7 percent growth for EU11). The external and domestic risks, if materialized, will affect negatively the prospects for growth in the SEE6 countries and slow the nascent economic (Figure 1) (IMF, 2012b). In an extreme case of major deterioration of economic conditions driven by the materialization of above risks, SEE6 output growth in 2014 would less than half (to 0.6 percent) of the baseline projection (of 1.9 percent). In 2015, growth dropped by a third (to 1.7 percent) from the baseline (2.6 percent).

Figure 1: SEE6 Real GDP Growth Rate under Baseline and Low Case Scenarios
A recent analysis focuses on EU member countries and shows that expanding the growth potential through structural reforms in a stable macroeconomic environment drives strong income convergence. Translated to the SEE6, it means that removing structural rigidities in the macroeconomic policy mix, increasing global integration, improving the economy’s productive potential and competitiveness, enhancing skills and labor productivity, and strengthening institutions would ultimately contribute positively to income growth and convergence.

**Figure 2: Income Convergence**

Source: World Bank staff.

Boosting incomes in the medium to longterm with the aim of converging with EU standards will mean
not only maintaining the pace of reforms—but also converting reforms benefits into robust and equitable economic growth. Both of these are proving challenging. The reform pace appears to have slowed during the financial crises. Countries will need to take advantage of the economic rebound to relaunch the reform and convergence processes. There is evidence suggesting that improvements in the business climate should be broad rather than targeted toward specific sectors, as growth and employment creating firms tend to be young and dynamic, but not concentrated in any particular sector. Improving trade links in terms of logistics, institutions and regulations will be important to take advantage of the EU market. In addition, governments need to provide reliable and streamlined processes that guarantee EU safety standards are met for exporting firms, particularly for agricultural exporters. Improvements in governance standards—including the rule of law—will be closely linked to the EU integration process. But reforms required by the EU will also help to boost economic growth in SEE countries. Such reforms are essential to boost labor demand, reduce unemployment, address the challenges driven by demographic changes and improve prosperity for all in SEE6. Increasing employment is essential to reduce poverty and to bring about shared prosperity in SEE6. Since the major source of income for most households is through selling labor, increasing employment opportunities and ensuring that workers have the skills necessary to take advantage of these opportunities are essential to increase the income generation capacity of the entire population.

7. CONCLUSION

What are the results of conducting reforms for speeding up the economic convergence? As of the analysis
it is shown that large potential gains could be reaped from structure reforms. Reports identify that in ten years the Euro-area GDP could be around 6% higher if Member States adopt measures to halve the gap vis-a-vis the average of the three best-performing Member States in each of the reform areas considered. When the structural reform will be successfully implemented, it seems promising to the growth of the economy. Growth effects are significant and higher growth potential can also stimulate investment demand and help to restore investment to pre-crisis level. Analyzing reforms it could be noticed that reforms that labour force participation yield the largest output effects in the short to medium run. Reforms relating to product markets can lead to large output gains. Structural fiscal reforms that shift the tax burden away from labour towards less distortionary taxes could be implemented relatively rapidly and boost employment and growth already in a short to medium run. Differences across countries mainly reflect where a country stands relative to “best performance” for different structural indicators. Performance gaps are particularly large in participation rates and tax structures, and reforms in these areas can deliver the largest effects. There are positive cross country spillovers of structural reforms, adding up to 10% to the gains in output in the long run. The demand effect boosts imports and supports trading partners’ growth, though this is partly offset by the competitiveness effect. Trade balance effects are relatively small and can turn negative where the demand effect dominates the competitiveness effect. Reforms lead to significant improvements in fiscal positions and can yield sizeable reductions in debt-to-GDP ratios in the medium/long term, alleviating the need for further consolidation measures and contributing to long-term debt sustainability.
How could Macedonia reach and sustain higher rates of economic growth thus speeding up the process of economic convergence too?

The research offers options that include increasing the labor contribution to economic growth by raising labor participation and reducing unemployment. The second option refers to the improvement of allocative efficiency. This considers promoting enterprise restructuring and reforming product market regulation as including regulation in the infrastructure sector. The next option is focused on deepening trade integration by promoting export-oriented FDI and developing the supply of exportable goods, meaning that Macedonia would need to integrate its logistics infrastructure. Accelerating the process of economic convergence will be supported by fostering technological progress. The recommendations are focused on policy-makers, inviting them to identify what policies are politically feasible and to be checked for their consistency with the overall objective of raising and sustaining economic growth. Next, these strategies need to generate institutional requirements that are commensurate with the existing institutional endowment of Macedonia. This will lead to a near-term focus on deepening trade integration and fostering innovation, while measures related to expanding labor participation and employment could be adopted more gradually with a long-term perspective. These measures would better position the country to fully benefit from EU Accession and to better manage the effects of the global financial crisis, by strengthening Macedonia’s international competitiveness. In addition to the policy measures directly recommended for deepening trade and fostering innovation, the following complementary policy initiatives would be required:
• Advancing *enterprise restructuring* (privatization) and the promotion of stronger *market competition* (improving product market regulation and de-regulation).

• Adjusting the *life long learning system* to market needs, encouraging *labor training* by firms, and improving the supply of (selected) skills by possibly reviewing *migration rules* for labor market segments where the skills-gap is binding.

• Political resistance to the trade and innovation measures associated to the proposed strategy is likely to be comparatively low, with the exception of enterprise restructuring efforts. *Compensatory policies* for workers negatively affected by enterprise restructuring should be considered.

• Preliminary evidence on the positive association between access to non-banking finance and total factor productivity suggests further examination of the role of non-banking financial institutions in the selection of investment opportunities and thus in fostering growth in Macedonia.

Summarizing, there are starting points to introducing high integration for structural adjustments and growth:

• faster productivity and quality catching – up

• faster wage catch-up

• faster upgrading of commodity structure leading to a faster disappearance of asymmetries in income and price-elasticity

• impact on invisible and income accounts: increased trade and transport services (balance impact neutral); increased tourism in both directions; increased deficits in other services (here lies one of EU’s comparative advantages; more personal transfers)
• impact on capital movements: increased FDI and portfolio investment; easier access to credits and better conditions for debt servicing

• greater pressure towards reducing the “undervaluation” of the national currencies: speed up of institutional changes and market functioning will increase convergence of price structures; additional pressure to achieve a higher level of international purchasing power because of greater tourist flows and increased imports; additional pressure to achieve monetary stability and use of the nominal exchange rate as an anchor with the view of approximation to the Maastricht criteria

• greater openness of EU market.

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HUMAN CAPITAL AND ITS IMPACT ON THE CAREER SUCCESS:

SERBIAN AND MACEDONIAN BANKING SECTOR

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Abstract:

Understanding the impact of human capital on the achievement of career success is essential for each individual in turbulent times on the labor market. In the current era of technology, globalization and the general progress principles of "knowledge economy" are ruling. So, each individual in the labor market, if he/she wants to build own career, should work on continuous improvement of human capital. This helps their recognition in the increasingly competitive labor market, which because of its exceptional dynamics, virtually eliminates "weak players", because of their inability to adapt to modern trends and staffing needs. When we talk about empirical research and confirmation of the fact that human capital affects on career success, this paper presents a statistical analysis of the correlation mentioned categories, based on 474 employees, in Serbian and Macedonian banking sector. Analyses such as chi-square test, Mann-Whitney U, Kolmogorov-Smirnov Z test and linear regression, proving the significance impact of the development of employees' human capital on career success, viewed through different hierarchical positions in a particular sector.

Keywords:

Human capital, career, banking sector, Chi-square test, Mann-Whitney U, Kolmogorov-Smirnov Z test, linear regression.
1. INTRODUCTION

Creating a better and more diverse sets or portfolio of skills and knowledge is certainly the most important problem of every person with a specific vocational profile. This is because the investment in improving the knowledge and skills creates a better position in the labor market, and therefore the possibility of making more money. Increased awareness of these intangible assets owned by an individual and the organization he works for, it attempted to define and clarify the notion of the kind of "invisible" capital. Human capital is the level of knowledge and skills that are recommended and characterized by one employee and thus determine its contribution to the productivity of an organization as well as the size of his earnings.

The success of his career, in addition to objective criteria based on knowledge and values that make human capital, can be defined as a positive psychological feeling connected with the achievements at work. Thus, the success in his career initiated human capital can be divided into two groups:

- objective for career success relating to the level of income and realized the position in the hierarchy of the organization.

- subjective success for career pertaining to satisfaction with the job.

The aim of the research refers to empirical confirmation the significance of human capital impact on the career success and fact that factors that influence on development of human capital influence on the career development, too. The research was conducted on the basis of questionnaire in banks and / or branches of banks operating in the Republic of Serbia and Macedonia. According to the questions in this questionnaire, the employees in the banking sector (474) have expressed their views on various aspects of
human capital and their affect on career.

2. LITERATURE REVIEW

The financial/banking sector is human capital intensive since it relies heavily on its human resource capital to offer services to its clients. This implies that the human capital plays a critical role in order for the banks to meet their goals and thus it is important to explore and study the HRM practices which impact on the human capital and banks’ financial performance.

The study recommended that commercial banks human resource management should embrace strategic human resource planning programs that are linked with the overall banks strategy. The bank human resource management should design an effective recruitment policy linked to the overall banks strategy. Human Resource Management (HRM) has made a transition from a state of insignificance to one of strategic importance academically and business wise (Schuler et al. 1993; Teagarden and Von Glinow 1997). As firms are entering into a more dynamic world of international business and as the globalization of world markets continues apace, comparative human resource management issues appear to be gaining momentum. Both practitioners and academics in the field of human resource management are increasingly aware of the need to examine and understand the human resource management systems suitable to different sectors of the economy. They are interested in finding relevant human resource management policies and practices for different types of organizations, for example, public/private sector, manufacturing/service sector. Human resource management practices are central to improve the quality of services offered by organizations. In the words of Pfeffer (1994), “having good human resource management is likely to generate much loyalty, commitment or
willingness to expend extra effort for the organization’s objectives”. Moreover, Stone (1998) remarks that human resource management is either part of the problem or part of the solution in gaining the productive contribution of people. The above quotes suggest that organizations need to effectively manage their human resources if they are to get maximum contribution of their employees and in turn return on their investment.

3. IMPORTANCE OF HUMAN CAPITAL DEVELOPMENT

In economic downturns, all employees are expected to be high performers and focused on what matters most. As organizations try to execute business strategies, focus employees on work that matters hold people accountable, pay for performance and measure the return on their intangible assets, human resource management practices continue to be revisited and revamped. Without doubt, human resource management is one of the company functions that have experienced significant changes over the last few decades. Since the beginning of the 1980s, a vast literature has been developed calling for a more strategic role for human resources (Guest 1987; Armstrong 1991). The increasing interest in human resources is due to the assumption that employees and the way they are managed is critical to the success of organization and can be a source of sustainable competitive advantage (Lado and Wilson 1994; Wright et al.1994). The growing importance attached to HRM as a pre requisite for business survival has fuelled studies into different fields namely International HRM, Comparative HRM, Micro HRM and Strategic HRM, which covers a vast array of styles and features of the concept. However, some writers, Guest (1987) regard HRM as a cosmetic measure in the sense that an organization having a Human Resource department does not necessarily guarantee a change in the management of their people as an asset which the concept prescribes. Over recent years there has been an
increasing interest in the field of human resource Management. Currently, the literature encourages the consideration of human resource as strategic factors, not only because they play important role in strategy implementation, also because they are beginning to be reckoned as sources of sustainable competitive advantage. Relationships between human resource management and productivity have been studied from different perspectives. Organizations in general face continuous challenges ranging from heightened national consciousness, employment and labour law requirements not to mention the need to ensure maximum utilization of their resources to their own advantage, a necessity for organizational survival. Since both indigenous and foreign companies operate in the same competitive and volatile environment in Serbia and Macedonia, both are bound to readjust their management practices to boost their performance. The current disposition of HRM is largely associated with the drastic expansion of businesses globally, technological innovations and fierce competition that characterizes the environment in which businesses operate today and the Serbian and Macedonian business environment is no exception to this global development.

4. METHODOLOGY

This study investigates the factors that influence on the development of human capital and their relative rankings depending on position of the employee in the organization (corporate culture, employee advancement and career success planning). Regarding the characteristics of the sample, the employees who participated in the survey were of different ages, genders and various positions in the organization or its sectors. In order to better understands the significance of the impact of human capital on the career success and the perception of employees about this issue, respondents were employees of various
departments and sectors that in turn perform different types of jobs (from counter workers, clericals, field agents, top management).

Statistical analysis was based on the questionnaire and number of procedures which according to the authors are the best instrumentation of nonparametric tests for assessing the factors correlation between development of human capital, career success and position of employees in the organization.

This analysis is included the following procedures (which will in upcoming text be detailed processed):

- Chi-square test
- Mann-Whitney U test
- The Kolmogorov-Smirnov Z test
- Linear regression.

5. HYPOTHESIS CONFIRMATION AND DISCUSSION ABOUT RESULTS OF RESEARCH

After conducting a survey and collected data analyzes were performed using the statistical program (SPSS) and the first in the series is a chi square test. This non-parametric techniques, among other things deals with the analysis of the statistical significance of the connection between two or more variables. It is necessary first to set hypothesis on which this technique is based:

- H0- Each factor that affects the development / level of human capital does not affect the same success in his career
- H1- Each factor that affects the development / level of human capital affects the same success in his career.
Based on the obtained indicators from the chi-square statistic and the significance level that is greater than 0.05 can be observed that this confirms the null hypothesis that says different factors of human capital differently influence the success in his career. Also, based on experience it is estimated that the value of Phi- Cramer's V coefficients indicate a low correlation between variables when it comes to their impact on the success of his career. This again means that, depending on the position in the organization and the level of competence of employees, various factors of development of human capital have different importance (low correlation between variables ranging from 0 to 0.3).

**Figure 1. Chi-Square Tests**

![Chi-Square Tests](image)

*Source: Authors estimation*
Given that the aforementioned Mann-Whitney U test is concluded that the different positions of employees differently ranked individual factors of human capital. In other words, the different positions of employees attach different importance factors affecting human capital. Thus, the null hypothesis is proved that in this case means that lower levels of employees (common officers, tellers) attach much more importance to factors of human capital development and success in the career than top management, which is in the highest position. A sample of observations is greater than 30, the statistical program calculates the statistics (Wilcoxon), which in this way proves that there are differences in the ranking factors for the development of human capital between categories of employees ($z = -0.42, p = 0.67$). As far as the Kolmogorov-Smirnov Z test that defines normality distribution of data, we can say that there is a certain moderate deviation from normality considering that this value should aim to 0. With an additional logarithmic transformation of variables or a square function may affect the distribution, asymmetry and depth, because of mathematical simplicity will be examined in this paper.
When we are talking about linear regression which is applied to the analysis of data obtained from the survey, there are several important things that should be observed when interpreting the results on the
significance of the factors that affect the development / level of human capital, the strength of their
correlations and relationships with other variables. In this regression model, as the dependent variable
was taken employment categories, which are explained previously, carried out the division of employees
into three groups (ordinary officials, heads of certain functions within the bank's top management). Thus,
the observation how the dependent variable is correlated with the independent variables in the regression
model, which has four (corporate culture, career advancement, success in career planning and the actual
salary).

The following tables of regression model, which in this case examined what impact on certain categories
of employees have certain factors of development of human capital, are the most important when it comes
to interpreting the results. The multiple correlation coefficient R, which shows a linear correlation
between the original values of the dependent variable and the model predicted values of the dependent
variable is 0.780, which indicates a very strong relationship. The coefficient of determination shows that
over 60% of the variability category of employees can be explained by the regression model, or
independent variables that belong to the human capital. The adjusted coefficient of determination (0.605)
is very close, almost identical to the value of the ordinary coefficient of determination, due to the
favorable ratio of independent variables and the total number of respondents - observations (the number
of independent variables is 4, and the number of observations 474).
As for the ANOVA procedure within the regression model it examines the validity of a regression model with the statistical population. This is about proving the hypothesis that:

\[
H_0: R^2 = 0 \quad \text{or} \quad H_1: R^2 \neq 0
\]

Based on the output results of the column Sig. = 0.000 conclusion is that the null hypothesis is rejected, and that the coefficient of determination is greater than 0 and which is established. This is to certify that the regression model explains a significant amount of variability in the dependent variable.

Source: Authors’ results based on available data

In the final table of coefficients observed standardized beta coefficients representing the height of the significance of the influence of some independent variables on the dependent variable. In fact, these
coefficients are reduced independent variables on the same phenomenon, so that all independent variables treated in the same way with the same scale evaluation. Logically, some values of \( \beta \) coefficients are negative which is in line with correlation coefficients from the results presented above. Regarding the factors affecting the level of human capital is slightly larger corporate culture takes precedence in relation to career advancement and success in career planning. The high value of the coefficient \( \beta \) for the current salary as an independent variable, that variable as the numerical predispositions and other specifics of these different factors of human capital, it is expected. This is due to the fact that the salary in some way and points out the differences in the hierarchy of an organization.

Figure 7. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Correlations</th>
<th>Co linearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.232</td>
<td>.125</td>
<td>.847</td>
<td>.005</td>
</tr>
<tr>
<td>Corporate culture</td>
<td>.019</td>
<td>.062</td>
<td>.020</td>
<td>.304</td>
</tr>
<tr>
<td>Employee advancement</td>
<td>-.026</td>
<td>.039</td>
<td>-.028</td>
<td>.507</td>
</tr>
<tr>
<td>Career success planning</td>
<td>-.006</td>
<td>.060</td>
<td>-.007</td>
<td>.917</td>
</tr>
<tr>
<td>Educational level (years)</td>
<td>.006</td>
<td>.010</td>
<td>-.003</td>
<td>.936</td>
</tr>
<tr>
<td>Current Salary</td>
<td>3.53E-5</td>
<td>.000</td>
<td>.781</td>
<td>.844</td>
</tr>
</tbody>
</table>

Source: Authors’ results based on available data
6. CONCLUSION

Developed countries have long known that the human capital is the biggest asset they have. Even in many marketing analysis, the element of "people" ranks among the major elements of marketing programs that ensure success in the market (product, promotion, distribution, pricing, packaging, planning, people ...). With each loss even the smallest part of the human capital which the organization has, it loses part of its knowledge, which essentially represents a certain way of reducing the competitive advantage. Therefore, the main development trend of the organization should be, in addition to other activities, the creation, development, sustainability and preservation of human capital at its disposal. The paper is talking about the human capital together with all its accompanying elements is one important link in the business of specific organizations but also link that makes employees more productive and successful in their career paths. Only employees with a strong potential of their own human capital for career success can create a work atmosphere that brings results.

REFERENCES:


HOLISTIC CYBER SECURITY IMPLEMENTATION FRAMEWORKS: A CASE STUDY OF JORDAN

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Abstract
This article applied a previously proposed holistic cyber security implementation framework (HCS-IF) to implement the National Information Assurance and Cyber Security Strategy (NIACSS) of Jordan. The NIACSS identifies strategic objectives, national priorities, and an implementation road map. For clarity, we went through HCS-IF’s major components. This process is intended to show a proof of concept; the complete analysis may take several hundreds of pages. Results showed that the HCS-IF is applicable to Jordan NIACSS.

Keywords: Cyber security implementation, Holistic cyber security, Security strategic controls, Strategy implementation framework

INTRODUCTION
Implementing cyber security is challenging for every country (Tisdale, 2015). The Jordanian government has assigned the National Information Assurance and Cyber Security Strategy (NIACSS) formulation and implementation of the National Information Technology Center (NITC) which is a subunit of the Ministry of Information and Communications Technology (MoICT). The NIACSS was motivated by the fact that current approaches to Cyber Security and Information Assurance (Cyber Security & IA) adopted by Jordanian Government organizations and private sector: are generally basic; not systematic; subjective; have no clear definition or boundaries, are not thorough; do not meet international standards; and do not deal effectively with threats emerging from cyberspace (Otoom & Atoum, 2013). Moreover, cyber security efforts in Jordan are not consolidated and risks are not addressed at the national level. The weaknesses in the current approaches, coupled with rapid advancements in technology place the National networks and the Critical National Infrastructure (CNI) at risk.
There is a critical need to secure the national information infrastructures of Jordan to be resilient to malicious attacks or arbitrary disruption to maintain a high level of trust in these infrastructures across government, with the private sector, and within the citizenry. In Jordan, ICT sector contributes to 14.1% Gross Domestic Product (GDP) and the government is committed to maintain its growth (Int@j, 2011). More information about the importance of ICT and ITES to Jordan economy can be found in: (Arab Advisor Group, 2010; Central Intelligence Agency/US, 2011; DOS & MoICT, 2010; Int@j & MoICT, 2010; Schwab, 2011).

The NIACSS identifies strategic objectives, national priorities, and an implementation road map. The strategic objectives aims to: strengthen National security, minimize risks to CNI, minimize damage and recovery time, enhance economy and National prosperity, and increase Cyber Security & IA awareness. National priorities address the critical needs required to guide the implementation towards achieving the National objectives. The National priorities cover the following areas: Risk Management, JO-CERT, Awareness, Standards and Policies, International Cooperation, Securing National Information Systems/NWs, CNI protection, NEC, and Legal Regulatory Regime. The implementation road map guides the implementation of the NIACSS. Successful implementation will demand collaboration within Government, with international partners, with the private sector, and with the citizenry of Jordan.

The NIACSS calls for establishing a well-defined organization called National Information Assurance and Cyber Security Agency (NIACSAs) that oversees the efforts required to implement the NIACSS. The NIACSAs is foreseen as a central national entity for governmental and non-governmental organizations regarding all information assurance and cyber security related issues.

We take the National Information Assurance and Cyber Security Strategy (NIACSS) as a case study to demonstrate the validity of the CSS-IF. For clarity, we go through HCS-IF’s major components (Atoum et al., 2014). This process is intended to show a proof of concept and is not meant to be through nor comprehensive; complete analysis may take several hundreds of pages.

**APPLYING HCS-IF FOR NIACSS**

To make our analysis readable, we demonstrate the case study by following a step by step approach. Note that monitoring, controlling, and other controls detailed HCS-IF (Atoum et al., 2014) are on-going activities that span over all the illustrated process.

**STEP1: REQUIREMENT ELICITATION & NIACSS GOVERNANCE VIEWPOINTS**

The NIACSS is taken as an input to the analysis process as proposed by HCS-IF (Figure 1). The Analysis Team may include, but is not limited to, members from: MoICT, National Information Technology Center (NITC), Internet Service Providers (ISPs), Health Sector, IT Business Experts, and Security Departments. It may also be useful to include team members from people who participated in the NIACSS development. Anyhow, forming a good team is not an easy job (Zec & Kajtazi, 2015). The more professional and diverse the team, the more successful the analysis output will be. This team is not officially formed; therefore we formed a team that consists of researchers who already have a member from the NITC. The “viewpoints” of the team are gathered, incorporated, and summarized. The Analysis Team worked to resolve conflict, generate a reconciled understanding, and make sure that analysis is
complete at least for the purpose of this research. An example on a “viewpoints” technique applied to the NIACSS is shown in Figure 2; it is given to illustrate the point and it is not meant to be thorough nor comprehensive.

Figure 1: HCS-IF (from Atoum et al. (2012)
GOVERNANCE: The NIACSA will be the major entity responsible for the implementation of the NIACSS. This entity does not exist yet and it has to be established. The NIACSA is foreseen as a central national entity for governmental and non-governmental organizations regarding all information assurance and cyber security related issues. The NIACSS has already anticipated the need to establish the NIACSA, but no implementation details about this entity were given. We suggest that structure of NIACSA should empower the employees and engage them into a collaborative environment. It must be adaptable to help the NIACSA be effective and able to provide cyber security products and services in an efficient manner. The organization structure should enable the NIACSA to allocate the required resources in order to achieve the NIACSS objectives. The organizational structure should be as a function of strategy; not the reverse. While organizational structure must enable strategy, it must also take into account the pragmatic issues of culture, management style, reward systems, administrative and Strategic Controls. It might also be useful to look into some similar international organizations to reuse, customize or build upon existing experience. We mention Governance for completeness, however we leave exploring this important field for future research.

STEP2: SECURITY STRATEGIC MOVES

REQUIREMENTS TO GOALS: Requirements must be converted to goals to make it easy to measure. Table 1 shows an example on mapping requirements to goals. The “Nation Wide Risk Management” is a requirement identified by the analysis team. It is broken down into specific described goals.

Table 1- Example – Requirements to Goals for NIACS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Goal</th>
<th>Description</th>
</tr>
</thead>
</table>

Figure 2: Example - “Viewpoints” applied to NIACSS.
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Goal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nationwide Risk Management</td>
<td>Establish Risk Governance Team</td>
<td>Risk Should be communicated from top to low level HR structures and vice versa. Risk should be a part of the global governance.</td>
</tr>
<tr>
<td></td>
<td>Establish Risk Management Model Nationwide</td>
<td>There should be global risk management for CSS. Government might utilize the use of international standards of risk management.</td>
</tr>
<tr>
<td></td>
<td>Identify Assets, Systems, and Networks</td>
<td>All assets should be inventoried to track and identify possible risk to each of them.</td>
</tr>
<tr>
<td></td>
<td>Set Security Goals and Objectives</td>
<td>Define specific outcomes, conditions, end points, or performance targets that collectively constitute an effective risk management posture.</td>
</tr>
<tr>
<td></td>
<td>Assess Risks</td>
<td>etc.</td>
</tr>
</tbody>
</table>

**GOALS PRIORITIZATION:** goals must be prioritized and aligned with available budget; threat trends and management concerns (see Table 2 and Table 3).

### Table 2: Example – Goal Prioritization (1/2).

<table>
<thead>
<tr>
<th>Measure (Strategic Control)</th>
<th>Importance/Weight</th>
<th>Establish Risk Governance</th>
<th>Establish Risk Management Model Nationwide</th>
<th>Identify Systems, and Networks</th>
<th>Assess Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce Risk</td>
<td>160</td>
<td>40</td>
<td>160</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>Improve Quality</td>
<td>50</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Increase performance</td>
<td>20</td>
<td>20</td>
<td>15</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Employ Regulations</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Acquire Resources (Money)</td>
<td>40</td>
<td>20</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Acquire Resources (HR)</td>
<td>20</td>
<td>10</td>
<td>20</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Acquire Resources (Technology)</td>
<td>40</td>
<td>10</td>
<td>30</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Enhance International Cooperation</td>
<td>20</td>
<td>5</td>
<td>20</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Asset management</td>
<td>30</td>
<td>2</td>
<td>20</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>etc.</td>
<td></td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Weights</td>
<td>400</td>
<td>21.525</td>
<td>73.875</td>
<td>17.1</td>
<td>15.8</td>
</tr>
</tbody>
</table>

### Table 3: Example – Goal Prioritization (2/2).
Weighted Goals | Weight
---|---
Establish Risk Management Model Nationwide | 73.875
Establish Risk Governance | 21.525
Identify Assets, Systems, and Networks | 17.1
Assess Risks | 15.8

In the Sample in Table and Table, the governance agency can prioritize goals according to goals importance given available budgets. The tables shows that “Establish Risk Management Model Nationwide” is relatively more important that the other goals. These weighted goals figures are calculated using specific formulas (as deemed by NIACSA). However values of each goal could be calculated using different approaches of lessons learned database, management preferences and expert judgments.

STEP3: STRATEGIC MOVES ROADMAP CREATION/UPDATING

A road map is created and is continually monitored and controlled by board of directors, PMO and Project Steering Committee. This roadmap is the master plan for all plans. Figure illustrates a sample high level roadmap using Microsoft Project 2010.

![Figure 3: Example – Master High Level Road Map for NIACS.](image)

STEP4: STRATEGIC MOVES EXECUTION

Once the security projects are kicked off, several metrics are got updated including project metrics, such as time and quality, or the performance metric of the whole implementation process. Figure and Figure show a sample Performance Metrics for CSS Implementation for Jordan and a sample dashboard for the H-ITsec-BSC, respectively.

Figure shows that the (Business Perspective, Internal Process Perspective, Stakeholders Orientation Perspective, Future Readiness) perspectives are achieving approximately (29%,51%,50%,54%)
respectively, which means that management may need to look deeply in reasons behind the low performance of business perspective compared to the other three perspectives. Details on Herath’s perspectives are already given in Section. Note that the Balance Score card balances between these perspectives and the numbers will not sum to 100%, but each perspective will. Note that each indicator should reach 100%, at the end of each year, once related goals are completed.

Figure shows the strategy map of CSS of Jordan at a particular point of time. Managers can know the percentage of achievement at the goal level and at the strategy level. This will be a very important tool in terms it will link goals and there leading and lagging indicators with the CSS, which ultimately allow instant view of the CSS implementation detailed status any time and thus taking appropriate actions when needed.

![Figure 4: Example – Dashboard of H-ITsec-BSC for NIACS (BSC Designer).](image-url)
STEP5: MEASURE ACHIEVED SECURITY LEVEL.

Utilizing the set of Audit and Governance controls in the CSS-IF, the NIACSA should be able to measure the achieved security level. The security level depends on implemented Security Strategic Moves, Security Maturity Models, and International Standards. Figure  shows how Strategic Moves are mapped to objectives where each objective might be achieved by one or more than one Strategic moves and each Strategic Move may contribute to achieve one or more than one objectives. Unless the NIACSS is fully implemented with the required resources, we will not be able measure the real achieved security level.
Figure 6: Example – Mapping Security Moves to Security Objectives.

**NITC PRACTITIONERS**

The case study has been conducted by several members of NITC with the roles of directors and advisors. NITC officials were asked if the HCS-IF is applicable to the NIACSS. The Officials have developed their judgment based on the case study presented in this article; the actual implementation of NIACSS will probably take more than three years. Their major comments falls in change management and human resources issues.

**CONCLUSION**

The HCS-IF is applied to the National Cyber Security Strategy of Jordan to illustrate the HCS-IF’s validity. An analysis team is formed to manage and execute the case study. The team found a list of sample security strategic objectives, build a sample strategic roadmap, and illustrated how a possible execution of these objectives is reflected on holistic dashboards that monitor the whole process including...
its performance measures. Results are demonstrated to NITC directors and security managers. They have made a consensus on the applicability of the HCS-IF to implement the CSS of Jordan. They had suggested a need for further analysis in the fields of human resources and change management which are outside the scope of our research.

DISCLAIMER

This paper does not represent the thoughts, intentions, plans or strategies of the NITC, Jordan’s MoICT, or any other Governmental or nongovernmental entity; it is solely the opinion of the authors. The NITC, MoICT, and/or any other entities are not responsible for the accuracy of any of the information supplied herein.

REFERENCES


CORPORATE SOCIAL RESPONSIBILITY AND FIRM CHARACTERISTICS: EVIDENCE FROM BSE 500

Akhita Arora¹
Tarun Kumar Soni²

Abstract

The purpose of this paper is to test the relationship between corporate social responsibility and different firm characteristics for 500 Indian firms. Using CSR rating from Karmayog-2010 survey, the empirical analysis has been conducted using simple regression and ordered probit model. The firm performance and other variables have been extracted from PROWESS (Release 4.0), a leading database in India. We have used both accounting and market based measures to measure firm performance. The results show that CSR does not have significant relationship with the firm performance measures of the sampled firms. Further, the results indicate positive relationship of CSR with size but negative relation with leverage and firm age indicating that larger, younger and levered firms are more active towards CSR in India than their counterparts. The results also imply that firms with higher equity shareholding are more aggressive in implementing CSR activities.

Keywords: Corporate Social Responsibility, Firm Performance, Firm Size, Leverage, Age

1. Introduction

In today’s competitive environment, companies are also accountable for the way they impact communities and their surroundings where they operate. India has a long tradition towards Corporate Social Responsibility (CSR) activities, but it is now only that the issue has become more prominent in the country. The recent modifications in the Indian Companies Act (Section 135) makes it mandatory for every company (having net worth of Rs 500 crore or more; or turnover of Rs 1000 crore or more; or net profit of Rs 5 crore or more during any financial year to constitute CSR Committee comprising of three or

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more directors, including an independent director) should spend at least 2% of its average net profits in
the current financial year on CSR activities. The recent changes will certainly lead to rise in CSR
activities in Indian corporate sector in the coming years. Here, the question arises whether the firms
highly engaged in CSR gets an improvement in financial performance or it acts as an additional burden
leading to drainage of valuable resources of firms, thereby, impacting financial performance negatively.
Our study tries to find out the linkages between CSR rating and firm performance and other
characteristics for a representative sample of Indian firms.

The argument that socially responsible spirit of a firm improves the reputation and financial performance
has been given by many scholars like Dodd, 1932; McGuire et al., 1988; Waddock and Graves, 1997;
Griffin, 2000; Orlitzky et al., 2003; Wu, 2006; Barnett, 2007; Wagner et al., 2009 and Khanifar et al.,
2012. One set of researchers (like Albinger and Freeman, 2000; Allouche and Laroche, 2005; Goll and
Rasheed, 2004; Bird et al., 2007; Nelling and Webb, 2009) believe that CSR activities improve firm’s
reputation and its relationship with its stakeholders which is often translated into economic benefits.
Authors like Parert and Eibert (1975); Ullmann (1985) and Roberts (1992) stated that the firms with
relatively better financial results are more willing to invest in CSR activities. Similarly, Ullmann (1985)
asserted that companies with weaker performance, i.e., less stable stock market patterns would be
relatively less keen to commit its resources towards social demands.

The other set of researchers (viz., Roman et al., 1999; McGuire et al., 1988; Bromiley and Marcus, 1989;
Wright and Ferris, 1997) reported negative relationship between CSR and firm performance, arguing that
high investments in CSR activities result in additional costs. Some studies also reported no significant
relationship between CSR and financial performance (Teoh et al., 1999; Margolis and Walsh, 2003;
Surroca et al., 2010; Lech, 2013).

Some researchers studied firm performance and CSR linkages by introducing the effect of other
moderating firm characteristics like previous years’ performance, size of firm, leverage etc. It has been shown by authors like McWilliams & Siegel (2001) and Barnett & Salomon (2003) that the link between CSR and firm performance disappears when control variables are introduced into econometric models, such as proxies for growth opportunities etc.

There has been an increasing intensity of research on the issue of CSR, but the relationship between CSR and firm performance has been mainly explored in developed economies. However, the empirical work on this issue is still at its infancy in India. Current research on CSR in India is mostly limited to self reported questionnaire surveys on CSR (for example, Khan and Atkinson, 1987; Krishna, 1992), nature and characteristics of CSR in India (Arora and Puranik, 2004; Sood and Arora, 2006), without testing its linkages with firm performance.

The impact of firm performance and characteristics has been examined on CSR rating for the top 500 Indian companies by Jain and Mishra (2011) and Soni and Arora (2016), Chahal et. al (2015). Against this backdrop, our study makes an empirical contribution to the existing literature by examining the linkages between CSR rating and firm performance and other firm characteristics which might influence firms involvement in CSR activities. We employ alternate estimation techniques for the analysis purposes i.e., regression analysis and ordered probit method. Further, departing from the conventional system of the prior studies of related literature and instead of focusing on a single measure framework, we utilize a range of measures of firm performance. We have used both accounting and market-based measures of firm performance.

The remainder of the paper is organized as follows: next section reviews the literature on the relationship between CSR and different firm characteristics. Section 3 discusses the variables, data sources, hypotheses construction and empirical model specification. Section 4 presents the empirical results on the relationship between CSR and firm characteristics and discussion thereof. The final section
concludes the study.

2. Review of Literature

The stakeholder theory suggests that social and financial performance of a firm are positively related as it improves stakeholders’ satisfaction level and consequently, a firms’ reputation and financial performance. Barnett (2007) suggested that the ability of socially responsible activities to create firm value lies in its positive stakeholder relations for the firm. Belkaoui (1976) also found positive relationship between economic performance and social responsibility.

According to Turban and Greening (1997), the companies which have a strong CSR commitment have an increased ability to attract and retain employees leading to reduced turnover and training costs. Cochran and Wood (1984) used CSR rankings developed by Moskowitz (1972) to test the relationship between CSR activities and performance of the firm but a weak positive association was found.

The studies like Goll & Rasheed (2004) and Allouche & Laroche (2005) proved that CSR has a positive impact on financial performance of a company. Similarly, Wu (2006) also found positive relationship between social and financial performance, proving that benefits of socially responsible actions are more than the cost of being socially responsible. Also, according to him, firm size has no impact on CSR or on financial performance.

On the same lines, Roberts and Dowling (2002), there is strong positive link between CSR and financial performance. Frooman (1997) has added that socially irresponsible firms’ had decreasing shareholders’ wealth implying that socially responsible behavior is necessary to increase shareholders’ wealth. The reputation of a firm provides crucial link between social responsibilities and profitability by reducing transactional costs and increasing product demand (Peloza, 2006 and Gardberg & Fombrun, 2006). A analysis of 52 studies by Orlitzky et. al., (2003) found positive relationship between CSR and financial performance; wherein, reputation was used as a proxy for CSR.
In a related study, Nelling and Webb (2009) found that the relationship between CSR and financial performance is a virtuous circle since it determines whether doing well socially contributes to healthy financial performance or firm exhibit superior financial performance by devoting more resources for social obligation. They used OLS regression with ROA and return on firm’s common stock as dependent variable and weighted CSR score as independent variable and found positive results.

Additionally, CSR has the ability to motivate, attract and retain the desired workforce and improve financial performance, according to Albinger and Freeman (2000). In a recent study, Li (2013) empirically examined the effect of firm performance on CSR disclosure in terms of disclosure frequency and quality among Chinese listed firms. His findings showed that better-performing firms are more likely to disclose CSR information and produce higher quality CSR reports.

On the other hand, studies like Trotman & Bradley (1981) and Mahapatra (1984) stated that CSR activities may lead to increased systematic risk. Similarly, Roman et. al., (1999) also presented negative relationship between CSR and financial performance as social activities involve financial costs. Friedman (1970) has also put it as a relative competitive disadvantage compared to other firms that are less socially active. Hence, a firm’s higher involvement in social activities may lower its financial performance if its social actions involve huge costs as pointed by Preston and O’Bannon (1997). These findings are also supported by Wright & Ferris (1997) and Cordeiro & Sarkis (1997) who reported negative relationship between analysts’ earnings-per-share forecasts and CSR activities of a firm. Frankle and Anderson (1978) differed with Belkaoui’s (1976) conclusions arguing that non-disclosing firms had performed consistently better in the market.

At the same time, Teoh et al., (1999) found no relationship between CSR and firm’s financial performance. The same has been confirmed by Surroca et. al.,(2010) reporting no significant relationship
between CSR and financial performance for a sample of 599 companies in 28 countries. In a recent study of Polish firms by Lech (2013), it has been found that CSR is not statistically significant in determining the financial performance.

Aras et al., (2010) investigated the relationship between CSR and financial performance and found no significant relationship between CSR and company’s profitability. They performed a regression analysis with profitability as dependent variable and firm size as an independent variable and found significant relationship between the two. Further, by adding R&D intensity as independent variable, it still produces negative relationship. This contradicts with Lioui and Sharma (2012) study that found negative interaction between CSR and firm performance but produced positive relationship when R&D was added as an independent variable. They supported McWilliams and Siegel (2000) statement, specifying that some studies on the relationship between social and firm performance suffers from several important theoretical and empirical limitations due to omitted R&D intensity in the variable.

In the Indian context, Jain and Mishra (2011) attempted to establish the relationship between different firm characteristics (such as number of employees, age of the firm, sales volume and firm performance) and CSR rating using stepwise regression method. The results showed that firm profitability and age does not influence CSR rating. The findings also show that a large firm i.e., a firm with large number of employees and high sales volume are working more actively towards social responsibility than counter firms.

Most of the empirical research on the relationship between social and financial performance of a firm remains inconclusive. This may be attributed to the use of different measures of CSR and performance variables and differences in the research methodologies. Against this backdrop, our study uses alternate measures of firm performance i.e., a combination of accounting as well as market-based measures and tries to include the necessary intervening variables in the analysis in the form of firm characteristics.
3. Research Design and Methodology

This section provides discussion on data sources, selection of firms and construction of the model for estimating the relationship between CSR rating and firm performance. It also presents the stylized facts of the companies engaged in CSR and not engaged in CSR.

3.1 Data

For the analysis purposes, CSR ratings have been obtained from Karmyog-2010 survey. The Karmayog CSR study presents a snap-shot of the largest 500 companies in India, with specific focus on their CSR initiatives. The study enables an understanding of how different kinds of companies (government owned, private and multi-national) from 30 different industries are responding to global and local conditions that demand and need more responsible behavior by all stakeholders. Karmayog’s objective of undertaking an annual CSR rating is to present a common person’s view and understanding of companies and how they behave. We have obtained CSR rating for the year 2010 from Karmayog survey.

![Figure 1: CSR Score of Company, Karmayog Survey](image)

(Level 5- High CSR Rating and Level 0 - No CSR activity)
The firm performance and other variables have been extracted from PROWESS\(^3\) (Release 4.0), a leading database in India. We have used both accounting and market based measures to measure firm performance, namely; Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE), Net Profit Margin (NPM), Stock Returns (SR) and Market Value to Book Value (M.V/B.V).

Next, we have used both long-term and short-term ROA and ROE as performance measures. The long-term firm performance measures (ROA and ROE) are calculated by averaging the performance of last five years. The alternative firm performance measures and other firm characteristics are described in Table 1.

Table 1: Description of Variables used in the analysis

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variable</th>
<th>Full Form</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Panel A: Corporate Social Responsibility</td>
<td></td>
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</tr>
<tr>
<td>1.</td>
<td>CSR</td>
<td>CSR Rating</td>
<td>CSR Rating taken from Karmayog 2010- Survey</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td>Panel B: Firm Performance Measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>ST-ROA</td>
<td>Short-Term Return on Assets</td>
<td>PBDIT/Total Assets</td>
</tr>
<tr>
<td>3.</td>
<td>LT-ROA</td>
<td>Long-Term Return on Assets</td>
<td>Average of past 5-years ROA</td>
</tr>
<tr>
<td>4.</td>
<td>ST-ROE</td>
<td>Short-Term Return on Equity</td>
<td>PBDIT/Paid-up Equity Capital + Reserves and funds</td>
</tr>
<tr>
<td>5.</td>
<td>LT-ROE</td>
<td>Long-Term Return on Equity</td>
<td>Average of past 5-years ROE</td>
</tr>
<tr>
<td>6.</td>
<td>ROCE</td>
<td>Return on Capital Employed</td>
<td>PBT/Capital Employed</td>
</tr>
<tr>
<td>7.</td>
<td>NPM</td>
<td>Net Profit Margin</td>
<td>PBDIT/Net Sales</td>
</tr>
<tr>
<td>8.</td>
<td>SR</td>
<td>Stock Returns</td>
<td>(Stock Price at year t+1 - Stock Price at year t + Dividends)/Stock Price at year t+1</td>
</tr>
<tr>
<td>9.</td>
<td>M.V/E.V</td>
<td>Market Value to Book Value</td>
<td>Market Capitalization/ Enterprise Value</td>
</tr>
<tr>
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<tr>
<td></td>
<td>Panel C: Other Firm Characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Age</td>
<td>Firm Age</td>
<td>Present year – Incorporation year</td>
</tr>
<tr>
<td>11.</td>
<td>Lev</td>
<td>Leverage</td>
<td>Borrowings/Total Assets</td>
</tr>
<tr>
<td>12.</td>
<td>Size</td>
<td>Firm Size</td>
<td>Natural log of Sales</td>
</tr>
<tr>
<td>13.</td>
<td>AdvInt</td>
<td>Advertising Intensity</td>
<td>Natural log of (Advertising Expenses/Sales)</td>
</tr>
<tr>
<td>14.</td>
<td>RDint</td>
<td>Research &amp; Development Intensity</td>
<td>Natural log of (Research and Development Expenses/Sales)</td>
</tr>
</tbody>
</table>

\(^3\) The PROWESS database is maintained by CMIE and is broadly similar to Compustat database of US firms. It is increasingly being employed in the literature for firm-level analysis of Indian industry and contains financial information on around 27,000 companies, either listed on stock exchanges or the major unlisted companies.
We use age, size, leverage, advertising intensity, research and development intensity and company type (MNCs, PSUs and private firms) as the firm characteristics. These variables have been defined in Panel C of Table 1. Indeed, these variables have an effect on both: engagement of the firm in CSR process and on financial performance. Hence, they may act as controls in our conceptualized model for estimating the possible interdependencies between CSR and firm performance.

3.2 Empirical Model Specification and Construction of Empirical Hypotheses

To examine the effects of firm characteristics on CSR rating, we develop the following baseline model and the empirical analysis has been conducted using simple regression model. Since the dependent variable; CSR rating is an ordinal variable, we also use ordered probit model for robustness.

$$CSR_i = \alpha_0 + \beta_0 * FP_i + \beta_1 * X_i + \varepsilon_i$$

where,

$CSR_i$ indicates CSR rating 2010 for firm i, obtained from Karmayog Survey,

$FP_i$ are alternate performance variables used in the analysis for firm i,

$X_i$ is a vector of firm characteristics,

$\alpha_0$ - intercept, $\beta_0, \beta_1$ - coefficients,

$i$ -1 to 500 firms,

$\varepsilon_i$ - error term.

3.2.1 CSR and Firm Performance

Peloza (2009) reviewed 128 studies that exploring the relationship between CSR and financial
performance and reported that 59% found positive relationship, 27% found mixed or neutral relationship and 14% reported negative relationship between the two. We form the following hypothesis on the basis of majority of the previous studies:

\( H_1 \): There is a positive relationship between CSR rating and firm performance.

### 3.2.2 CSR and Age

The age of a firm could have an effect on the maturity and experience level of a firm. An old company reflects a higher level of maturity level which results in greater ease of engagement (St-Pierre, 2010). It shows that the companies recently established would be those which are intensely involved in CSR activities. This can be explained by the verity that a young firm may adopt more pro-active and positive attitude on CSR issue. Therefore, we expect negative relationship between engagement in CSR initiatives and age of firms.

\( H_2 \): There is negative relationship between CSR and age of firm.

### 3.2.3 CSR and Size

Vives et. al., (2005) asserted the existence of a relationship between size and socially responsible behavior. Research on organizational legitimacy implies that larger and more visible organizations experience more pressure to conform to societal expectations (DiMaggio and Powell, 2000). Large firms are more visible to the public (Suchman, 1995) and are likely to be under scrutiny. Empirically, a positive relationship has been demonstrated between size and involvement of firms in the local community or with an environmental commitment (Besser 1999; Murphy et. al., 1992; Vives et. al., 2005). If the size of a firm is small, the commitment of adopting CSR approach is also low (Waddock and Graves; 1997). Thus, the following hypothesis is formed:

\( H_3 \): There is positive relationship between CSR and firm size.

### 3.2.4 CSR and Beta
Systematic risk (beta) is defined as the covariance between returns on a risky asset (e.g. a company’s stock) and market portfolio, divided by the variance of the market portfolio (Copeland and Weston, 1983). Companies having lower systematic risk are expected to have higher level of CSR activities as they have more stable pattern of stock returns. The stable market performance can enhance their discretion to commit resources in CSR activities (Roberts, 1992).

\( H_4: \) There is negative relationship between beta and CSR rating.

3.2.5 CSR and Advertising, Research & Development (R&D) Intensity

Recent studies have demonstrated that advertising as well as research and development (R&D) are related to socially responsible behaviour of a firm and it is important to take them into consideration while estimating the impact of firm characteristics on CSR. There is a theoretical literature linking investment in R&D to improvement in firm performance (Griliches, 1979), considering R&D as a form of investment in technical capital. Investment in technical capital results in knowledge enhancement, which leads to product and process innovation. There is strong empirical evidence to support this hypothesis. We hypothesize that R&D and CSR are positively related, since many aspects of CSR create either product innovation, process innovation, or both.

\( H_5: \) There is a positive relationship between advertising intensity and CSR.

\( H_6: \) There is a positive relationship between R&D intensity and CSR.

3.2.6 CSR and Firm-Type Dummies

The inclusion of firm-type dummies is to control the firm-level factors which explain variation in CSR performance across different types of companies, such as economies of scale and competitive intensity. Three dummies are created for capturing the effect of different type of companies: PSUs, private concern, Indian multinational and International multinational company. The dummies created are one less than the different types of companies i.e., three dummies.
4. Empirical Results

In this section, we present estimation results for the impact of firm characteristics on CSR rating. But before moving to the main analysis, the basic properties of the data have been studied.

Table 2: Comparison of firms engaged in CSR activities and not engaged in CSR activities on the basis of firm characteristics

<table>
<thead>
<tr>
<th></th>
<th>Panel A: Firms engaged in CSR</th>
<th>Panel B: Firms not engaged in CSR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firm Performance Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST-ROA</td>
<td>384</td>
<td>-0.151</td>
</tr>
<tr>
<td>LT-ROA</td>
<td>120</td>
<td>-0.062</td>
</tr>
<tr>
<td>ST-ROE</td>
<td>384</td>
<td>-0.805</td>
</tr>
<tr>
<td>LT-ROE</td>
<td>383</td>
<td>-1.208</td>
</tr>
<tr>
<td>ROCE</td>
<td>384</td>
<td>-0.615</td>
</tr>
<tr>
<td>Total Returns</td>
<td>371</td>
<td>-4.300</td>
</tr>
<tr>
<td>NPM</td>
<td>340</td>
<td>-0.262</td>
</tr>
<tr>
<td><strong>Other Firm Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beta</td>
<td>355</td>
<td>0.230</td>
</tr>
<tr>
<td>Age</td>
<td>385</td>
<td>1.000</td>
</tr>
<tr>
<td>Lev</td>
<td>379</td>
<td>0.000</td>
</tr>
<tr>
<td>ADVint</td>
<td>199</td>
<td>-10.740</td>
</tr>
</tbody>
</table>

We examine the potential difference between the firms engaged in CSR (firms with 1-5 CSR rating) and those not engaged in CSR (firms with 0 CSR rating), by comparing the characteristics of these two types of firms in Table 2. Based on the firm characteristics reported in Panel A and B of Table 2, it has been observed that, on an average, firm performance variables have higher mean values for firms engaged in CSR. In case of Short-Term Return on Equity (ST-ROE) the mean return for firms not actively engaged in CSR is 0.356 and on the other hand mean score for firms engaged in CSR is 0.458. Further, from the analysis of mean score of other firm characteristics like Age, Lev and Size; the results indicate that larger,
older and less levered are more active on CSR front.

Table 3: One Way ANOVA: Categorical Variable CSR score

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Sum of Squares</th>
<th>Degree of Freedom</th>
<th>F-score</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>STROA</td>
<td>0.05</td>
<td>4.000</td>
<td>2.058</td>
<td>0.085*</td>
</tr>
<tr>
<td>LTROA</td>
<td>0.02</td>
<td>4.000</td>
<td>0.595</td>
<td>0.667</td>
</tr>
<tr>
<td>STROE</td>
<td>1.45</td>
<td>4.000</td>
<td>2.951</td>
<td>0.020*</td>
</tr>
<tr>
<td>LTROE</td>
<td>0.38</td>
<td>4.000</td>
<td>0.196</td>
<td>0.940</td>
</tr>
<tr>
<td>ROCE</td>
<td>0.27</td>
<td>4.000</td>
<td>1.486</td>
<td>0.205</td>
</tr>
<tr>
<td>M.V/E.V</td>
<td>73.97</td>
<td>4.000</td>
<td>0.975</td>
<td>0.421</td>
</tr>
<tr>
<td>Total Returns</td>
<td>4.23</td>
<td>4.000</td>
<td>0.221</td>
<td>0.927</td>
</tr>
<tr>
<td>NPM</td>
<td>84909.26</td>
<td>4.000</td>
<td>4.518</td>
<td>0.001</td>
</tr>
<tr>
<td>Beta</td>
<td>0.64</td>
<td>4.000</td>
<td>1.788</td>
<td>0.130</td>
</tr>
<tr>
<td>Age</td>
<td>11382.83</td>
<td>4.000</td>
<td>4.557</td>
<td>0.001*</td>
</tr>
<tr>
<td>Size</td>
<td>88.24</td>
<td>4.000</td>
<td>12.620</td>
<td>0.000*</td>
</tr>
<tr>
<td>Lev</td>
<td>0.98</td>
<td>4.000</td>
<td>5.636</td>
<td>0.000*</td>
</tr>
<tr>
<td>RDi int</td>
<td>4.42</td>
<td>4.000</td>
<td>0.286</td>
<td>0.887</td>
</tr>
<tr>
<td>ADVint</td>
<td>137.05</td>
<td>4.000</td>
<td>6.230</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

To check whether the differences observed in mean values are statistically significant or not, we applied One-way Anova test (see Table 3) on our dataset. We categorize our dataset on the basis of CSR score which ranged between 0 and 4 i.e. from lowest to highest grade. The results for the same have been presented in Table 3. The null hypothesis of no significant differences in mean values was rejected for ST-ROE, Age, Size, Lev and ADVint indicating that the differences among the above mentioned variables are statistically significant. Further, the null hypothesis of no significant difference was accepted for other variables. Thus, the results indicate that the differences in CSR rating do not impact the financial variables except for return on equity in short-term (ST-ROE). While the control variables like Age of firm (Age), Sales (Size), Level of borrowings (Lev) and Advertising Intensity, differ among companies which are graded with different CSR score.

After the F-test analysis, we proceed towards our main analysis and estimate the relationship between
CSR rating (dependent variable) and firm characteristics (explanatory variables) using OLS and ordered probit regression method. The OLS results have been reported in Table 4 and the results from ordered probit regression are shown in Table 5. The alternate firm performance variables have been taken as the dependent variables in different columns (from 1 to 8) and the coefficients have been reported accordingly. We have run eight different analyses using each performance variable as the dependent variable one by one and the results have been reported in Table 4 and 5.

Table 4: Impact of Firm Characteristics on CSR Rating using Ordinary Least Squares Method

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.218</td>
<td>0.309</td>
<td>0.563</td>
<td>0.407</td>
<td>0.585</td>
<td>0.378</td>
<td>0.549</td>
<td>-2.181</td>
</tr>
<tr>
<td></td>
<td>(2.535)</td>
<td>(1.413)</td>
<td>(1.411)</td>
<td>(1.400)</td>
<td>(1.380)</td>
<td>(1.448)</td>
<td>(1.394)</td>
<td>(1.676)</td>
</tr>
<tr>
<td>LTROA</td>
<td>3.628</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>(3.052)</td>
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</tr>
<tr>
<td>STROA</td>
<td></td>
<td>1.745</td>
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</tr>
<tr>
<td>LTROE</td>
<td></td>
<td>0.016</td>
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<tr>
<td>STROE</td>
<td></td>
<td></td>
<td>0.516</td>
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<td>(0.581)</td>
<td></td>
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</tr>
<tr>
<td>ROCE</td>
<td></td>
<td></td>
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<td>-0.423</td>
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<td>(1.137)</td>
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<tr>
<td>SR</td>
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<td>(0.078)</td>
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</tr>
<tr>
<td>M.V/E.V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.941</td>
<td></td>
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<td></td>
<td></td>
<td>(0.730)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beta</td>
<td>0.980</td>
<td>0.253</td>
<td>0.019</td>
<td>0.209</td>
<td>0.064</td>
<td>0.045</td>
<td>0.077</td>
<td>0.230</td>
</tr>
<tr>
<td></td>
<td>(0.779)</td>
<td>(0.626)</td>
<td>(0.609)</td>
<td>(0.615)</td>
<td>(0.572)</td>
<td>(0.580)</td>
<td>(0.587)</td>
<td>(0.552)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.010*</td>
<td>-0.010*</td>
<td>-0.010*</td>
<td>-0.010*</td>
<td>-0.010*</td>
<td>-0.010*</td>
<td>-0.011*</td>
<td>-0.011**</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Size</td>
<td>0.200</td>
<td>0.319**</td>
<td>0.352***</td>
<td>0.330**</td>
<td>0.363***</td>
<td>0.355***</td>
<td>0.364***</td>
<td>0.393***</td>
</tr>
<tr>
<td></td>
<td>(0.296)</td>
<td>(0.143)</td>
<td>(0.141)</td>
<td>(0.141)</td>
<td>(0.138)</td>
<td>(0.140)</td>
<td>(0.141)</td>
<td>(0.133)</td>
</tr>
<tr>
<td>Lev</td>
<td>-2.300</td>
<td>-1.700*</td>
<td>-2.027**</td>
<td>-1.992**</td>
<td>-2.364***</td>
<td>-1.979**</td>
<td>-1.983**</td>
<td>0.078</td>
</tr>
<tr>
<td></td>
<td>(1.471)</td>
<td>(0.944)</td>
<td>(0.890)</td>
<td>(0.881)</td>
<td>(0.918)</td>
<td>(0.891)</td>
<td>(0.887)</td>
<td>(1.152)</td>
</tr>
</tbody>
</table>
The estimated results show that firm performance of Indian firms is positively related to CSR rating (except ROCE), although the coefficients are not statistically significant. Therefore, our null hypothesis of significant positive relationship between CSR rating and firm performance is rejected because of the lack of significance. It implies that it is not necessary that financially better performing firms are more socially active. The results indicate positive relationship between CSR and firm size, which is consistent with the findings of Waddock and Graves, (1997); Walker and Tobias, (2006) implying that larger firms are more actively engaged in CSR activities. Certainly, larger the size of the firm, more its visibility in the society and thus, it requires more socially responsible behaviour as it raises stakeholder’s pressure on firms to be in tune with their social environment. Further, the age and leverage of firms turns out to be negatively related with CSR, thereby accepting null hypothesis. This finding is supported the previous studies like Cabagnols & Le Bas, (2008) and St-Pierre, (2010); confirming that younger firms are more active towards CSR in India than their counterparts. The analysis show that leverage has a negative impact on CSR rating implying that firms engaged in CSR activities have less leverage in their capital structure. The results are not very encouraging in case of other firm characteristics also like beta, advertising intensity and R&D intensity, which is in contrast with McWilliams and Siegel, (2000). It might be because of the different estimation techniques used by them for the analysis.

Table 5: Impact of Firm Characteristics on CSR Rating using Ordered Probit Method

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
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<tr>
<td>LTROA</td>
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<td></td>
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<td></td>
<td>(4.243)</td>
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<td></td>
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<tr>
<td>STROA</td>
<td>1.760</td>
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<td></td>
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</tr>
</tbody>
</table>

Notes: *, ** and *** indicate significance at 10%, 5% and 1% levels.
The figure in parentheses indicates standard error.
This relationship is further tested using ordered probit specification in Table 5 which also reflects the similar story. The simple OLS method might give biased results as our dependent variable (i.e., CSR rating) is an ordinal variable, therefore; for robustness, ordered probit method has been used. The performance of Indian firms is found to be positively related to CSR activities; although the coefficients are not statistically significant using ordered probit method also. It implies that CSR behavior is not motivated by firm’s financial performance. These results are contradictory to the accumulating body of empirical studies which support positive impact of CSR on financial performance. This contradiction
could arise due to different firm performance or CSR measures used or different estimation techniques used. Further, it is observed in ordered probit results also that larger (measured by size of the firm) and younger (measured by age) Indian firms are more actively engaged in CSR activities. It signifies that younger firms might adopt more pro-active and inclined attitude on CSR issue.

The results verify the firms engaged in CSR have less leverage in their capital structure as shown by the negative leverage coefficient. The negative impact of leverage on CSR indicates that firms with lower debt financing have higher CSR ratings. It implies that firms with higher equity shareholding are more aggressive in implementing CSR activities. We could not establish any relationship between advertising; R&D intensity and CSR rating as their coefficients are not found to be significant at any of the significance level. It might be possible that advertising; R&D intensity does not influence CSR rating.

**Table 6: Outcome of the Hypotheses**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Outcome</th>
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<tbody>
<tr>
<td>Hypothesis 1</td>
<td>Rejected</td>
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<tr>
<td>Hypothesis 2</td>
<td>Accepted</td>
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<tr>
<td>Hypothesis 3</td>
<td>Accepted</td>
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<tr>
<td>Hypothesis 4</td>
<td>Rejected</td>
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<td>Hypothesis 5</td>
<td>Rejected</td>
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<tr>
<td>Hypothesis 6</td>
<td>Rejected</td>
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</table>

5. Conclusion

The present study serves as a pointer to the relationship between CSR and firm characteristics for the top 500 Indian firms. The current research on CSR in India is mostly limited to nature and characteristics of CSR in India without focusing on the social and financial performance relationship. However, some recent studies have tested this relationship but they have not focused on other firm characteristics. Our study intends to fill this gap by empirically testing the relationship between CSR and firm characteristics.
The analysis leads us to several conclusions: CSR and firm performance link does not hold good for our sample which means CSR behavior of the firms is not motivated by their current/past profitability. However, other firm characteristics like age, size and leverage do influence the CSR behavior in a company. The negative relationship between firm age and CSR ratings imply that recent/newer firms are more active in pursuing socially responsible behavior and older firms should adopt similar strategies because ignoring CSR in the long-term may lead to increased stakeholder pressure, thereby, leading to critical situations. Further, the positive relationship between firm size and CSR ratings are in line with Besser (1999); Murphy et. al., (1992) and Vives et. al.,(2005) which have shown that the behavior of firms varies according to size of the firm. Larger the size of the firm, more the visibility, thereby raising stakeholder pressure on firms to be socially responsible. We can say that the factors like age, size and leverage of the firm have significant impact on CSR activities of the firm rather than its financial performance. It seems that the accounting and market performance of the firm does not influence CSR rating but its age, visibility in the market etc. does.

Some additional factors can be explored further which influence CSR activities in a firm. Future research work should also concentrate on qualitative aspects like mission/vision of the organization, organizational culture, ethics, religion of manager or founder etc. which are also important factors which can influence CSR behavior.

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ORGANIZATION AND ADMINISTRATION IN ADULT AND COMMUNITY EDUCATION

Radhika Kapur

Introduction

The dominant feature of adult education in India is the multiple characters of its manifestations. This multidimensionality stems from two conditions, which are that adult education is the task of many agencies and the fact that it is only one of several tasks in which the agencies are engaged. Adult education is not the function of one organization exclusively, nor is it the exclusive job of the organization of which it is a part of. Adult education takes place in a shared program of part time activities operating in a variety of forms (McClusky, 1956).

In India, democracy would be meaningless and insignificant if the citizens of the country are not educated. The security, law and order within the country is vested in the hands of the citizens and for this purpose they are required to be educated in order to deal with the problems and difficult situations. Adult education means the education of grown up men and women who are above the age of 18 years. It includes implementation of all the activities with an educational purpose. It is mostly on part time basis and goes simultaneously with job or earning of living. The main aim behind adult education is to prepare every adult of the country to render an effective contribution towards democratic social order; in this case, it is also termed as “social education” (Preserve Articles, 2011).

Adult education is imparted under two main aspects: First is Adult Literacy that is the education of those adults who have never had schooling before, and secondly, continuation education is educations of those adults who have had some kind of schooling before. Under the concept of adult education, mainly the points which are stressed upon are knowledge of current affairs, characteristics of the individual, behavioral traits, sense of morality and discipline and their capability to render effective participation in measuring the security of their country (Preserve Articles, 2011). During 1918, there was very little progress in the field of adult education. Gradually, this concept started developing, there were development of night schools. In the 19th century, even the rural libraries were established. With the emergence of Congress Governments in 1937, adult education became one of the major responsibilities of the government. In the year 1939, a CABE committee was established with the objective to solve the problems of illiteracy and encourage adult education. It introduced free and compulsory primary education for adults. There has also been establishment of voluntary organizations to promote free and understandable educational programs for adults (Answers.com, 2012).

Agencies Involved in Adult Education

The following are the agencies and institutions that are dedicated towards adult education: (Preserve Articles, 2011).
1. Teachers, Government servants, NSS, NGOs, associations, volunteers, social education workers are the organizations that work towards implementing adult education.

2. Regular educational institutions like schools which offer regular morning classes or evening classes or classes on part time basis. Schools which take place on weekends, colleges, rural colleges, community centers, agriculture extension groups, workers educational associations and voluntary organizations.

3. Informal educational devices such as forums, camps, study circles, group discussions, tuitions, coaching centers, listening groups, places where people could get themselves involved to develop their social and communication skills.

4. Recreational centers, educational bodies such as plays, acting groups, fairs, theatres, cinemas, clubs, societies etc.

5. Institutions such as religious associations, army, societies that aim to assist the needy individuals, cooperative societies, parents association and other government departments. These organizations do not have a primary aim of providing education, but they aim to help people in satisfying their needs (Preserve Articles, 2011).

**Principles of Adult Education**

Adults are internally Motivated and Self-directed – It is vital to facilitate the mindset of the adults towards learning. In this case, it is mandatory to formulate a learning program, in other words, proper curriculum set up, development of rapport with them, showing them approachability, motivating them to ask questions and not overloading them with work, providing feedback, showing interest in their performances and also encouraging them to use other sources such as books, newspapers, journals etc. These are the ways to formulate an appropriate learning set up (QOTFC, 2007).

Adults bring Life Experiences and Knowledge to Learning Experiences – What experiences they have had in lives, knowledge that they already possess, they like to explore their previous learning to new learning. It is important to find out about the student, their interests, experiences etc. All the experiences have to be made use in problem solving and gaining a new understanding of the current information presented by the educator (QOTFC, 2007).

Adults are Goal Oriented – When adults feel that they need to learn in order to cope up with their life situations only then they engage themselves into learning. For an educator, it is important to provide effective and significant learning material and techniques which can be directly connected to ones goals and objectives. Case studies, examples, experiences should be used in order to enable them to effectively understand the concepts. Educators also have to ask a lot of questions in order to determine the extent of learning of adults.
Adults are Relevancy Oriented – Adult learners are keen to understand the relevance of what they are learning and how the knowledge will help them in real life. For example, if an adult is taught how to bake a cake, then it is important to view it practically also by taking him/her into the kitchen, providing all the ingredients and teaching him/her practically how to bake a cake. Fieldwork is also a kind of project that would help them in determining the relevance of their learning and would also contribute in enhancing the social skills.

Adults are Practical – Through practical fieldwork experience, adults move out of the classroom and communicate with the clients and other people and face real life situations. They obtain this understanding that learning also applies to real work, job, career and life. Educators have to develop confidence and make their students responsible and active. There should be active participation amongst students which means that they should perform practically rather than just observing.

Adult Learners like to be respected – This can be carried out by taking interest in their learning. All the previous learning or experiences have to be acknowledged which they share with the educators and the fellow students. Adult learners should be treated as colleagues by the educators who are of the same level in life and experience. At every level/opportunity, there should be motivation, encouragement of ideas, thoughts, reasoning and provision of constructive feedback (QOTFC, 2007).

**Strategies for Implementation of Adult Education**

Outreach and Marketing Strategies – Marketing programs should be encouraged in order to motivate students to join them. Flyers, notices, advertisements and so forth are some of the ways to encourage students. Besides adopting ways of encouraging students towards education, there should also be distribution of clothes, books, food etc that would motivate students to come and learn.

Instructional Strategies – Interviewing, talking, listening, in other words, effective communication are the means of providing instructions and education to the students in an efficient manner. Understanding what their major weaknesses are, formulating methods and teaching techniques in order to overcome those weaknesses are effective instructional strategies. Providing them information about time management, financial management, stress management, effective communication skills are part of instructional strategies. Adults should be educated about all aspects of life which may enable them to become good human beings and live their lives successfully.

Retention Strategies – The teachers and other staff members involved in the area of adult education have to develop means for retaining the students, because dropout frequently takes place during the first six hours of enrolment. At the initial level first should be introduction of the teachers and the students and performance assessment or examination should always be conducted at the end of the lesson plan. Examinations and tests tend to make those learners vulnerable who have never had any kind of schooling before. Flexibility and openness are also important retention strategies within the classroom setting. If the performance of the students is appropriate then they should be rewarded and appreciated for it. They should be communicated with all the appropriate advantages and benefits that are associated with their learning and opportunities that would be open to them upon finishing with their education.

Political Strategies – Under the political strategies the learners get accustomed to the political aspects of the country. All kinds of issues, rules, regulations, policies, government regulations, how to
vote everything is addressed to the students. It is vital for the adult learners to possess sufficient knowledge regarding the political affairs of the country. Within the classroom setting, the instructor should try to organize debates on various political issues. In this case, even role playing is encouraged; students assume different roles in order to help them to have a better understanding of the political situation.

Strategies to Maximize Motivation and Minimize Obstacles – Teachers and educators will always encounter barriers and impediments during the course of their teaching. Means and ways therefore, have to be formulated to maximize the positive and minimize the negative. Maximization of all the positive factors can be done with the development of goals and objectives. Students have to understand the significance of learning which they are involved into and feel that they are doing something constructive by devoting their time and energy towards learning. In order to minimize the negative influences, the first and the foremost focus should be on minimization of those influences over which one has control. For example, financial problems may be a barrier towards education and means have to be developed in order to overcome those problems (Sobol and Sheldon, n.d.).

Identifying Strengths and Weaknesses

In the organization and administration of adult and community education, it is important to identify the strengths and weaknesses of the adult learners. This is crucial the reason being that educators would help the learners in formulating realistic goals and objectives and the steps and measures that have to be taken to achieve them. Programs that are required to administer intervention instruments include the following: (Handbook, 2011).

1. Learning Styles – Auditory, visual, tactile, social etc are the kinds of learning styles that are used to formulate identification questions that will help the educators as well as the learners to identify the techniques and materials that are appropriate in fulfilling their needs and requirements.

2. Barrier Identification – These questions are mainly related to the problems that might arise in the course of learning such as transportation problems, child care, health care, family issues, finances, scheduling, stress, mental abilities, attitude, time management and so on. Educators would help the learners in recognizing these problems and means to overcome them.

3. Special learning needs screening – Some adult learners possess learning problems and other disabilities such as hearing problems, speech problems and their vision or mental capacity is slow. Some students do not understand easily, they are slow learners, some students would like to remain isolated and do not socialize with people in school and some students possess different medical issues. Teachers and family members are expected to pay special attention to these
students and identify appropriate measures, strategies and accommodation or carry out diagnostic treatment (Handbook, 2011).

Identification of Special Educational Needs
There have been involvements of three main kinds of questions in case of identification of special educational needs (SEN): (Handbook, 2011).
Firstly, it is essential to find out if the learners have had any kind of special help or classes earlier.
Secondly, the main reasons would have to be assessed that why are they facing difficulties and problems in understanding even manageable concepts.
Thirdly, identification of those concepts and areas which the students find difficult to learn and understand. For instance, any particular area such as Math or Science (Handbook, 2011).

It can be stated that the adult learners would have to assess, identify and become aware of different strategies, methods and measurements that would be appropriate to learn effectively. The reason being, that their learning ways are unique therefore; the teaching methods have to be devised in accordance with the problems and difficulties that the students are undergoing in the course of learning and their distinct learning ways (Handbook, 2011).

Leadership Theories
Under the organization and administration of adult and community education it is essential to understand what the leadership theories are. Interest in leadership began to develop during the early part of the twentieth century. Early leadership theories focused on the qualities of the leaders and other subsequent theories also looked at other variables such as situational factors and skill levels. The following leadership theories have been distinguished as follows: (Cherry, n.d.).

Great Man Theories – These theories assume that the capacity for leadership is intrinsic and great leaders are born not made. These also portray that great leaders are heroic and rise in their area when leadership is required. The term “great man” is used because leadership is thought primarily of male quality.

Trait Theories - Trait theories often recognize particular personality or behavioral characteristics collectively shared by leaders. If particular traits are key features of leadership, then how do we explain people who possess those qualities but are not leaders? This question is one of the problems in using trait theories to explain leadership.

Contingency Theories - Contingency theories of leadership focus on particular variables related to the environment that might determine which particular approach of leadership is best suited for the situation. According to this theory, no leadership approach is best in all situations. Success depends upon a number of variables, including the leadership approach, traits of the followers and characteristics of the situation.

Situational Theories - These theories recommend that leaders choose the best course of action that is based upon situational variables. Different approaches of leadership may be more appropriate for certain types of decision-making; for example, in a situation where the leader is the most knowledgeable and experienced member of a group, an authoritarian approach might be most appropriate. In other instances where group members are skilled experts, a democratic style would be more effective.

Behavioral Theories - These theories of leadership are based upon the belief that great leaders are
prepared, not born. Rooted in behaviorism, this leadership theory focuses on the actions of leaders not on mental qualities or internal states. According to this theory, people can study to become leaders through teaching and observation.

Participative Theories - These leadership theories suggest that the ideal leadership approach is one that obtains the input of others into account. These leaders promote participation and contributions from group members and help group members feel more relevant and committed to the decision-making process. In participative theories, however, the leader retains the right to permit the input of others.

Management Theories - These theories, also known as transactional theories, center upon the role of supervision, organization and group performance. These theories base leadership on a system of rewards and punishments. Managerial theories are often used in business; when employees are doing well, they are rewarded; when they not make the grade, they are reprimanded or punished.

Relationship Theories - These theories, also known as transformational theories, center upon the connections formed between leaders and followers. Transformational leaders motivate and instigate people by helping group members recognize the significance and higher quality of the mission. These leaders are focused on the performance of group members, but also want each person to fulfill his or her potential. Leaders with this approach often have high ethical and moral standards (Cherry, n.d.).

**Adult Education Programs**

The following programs come under adult education programs: (U.S. Dept of State, n.d.).

1. **Senior School Diplomas** – In this program, adult learners acquire the knowledge and education of school up to class 12. They do not pursue further to complete their graduation or any other program. They have just completed their schooling. The courses covered include Math, writing, Science, Social Science, interpreting literature and arts.

2. **College-Level Examination Program (CLEP)** – This program serves those students who have completed their schooling. Adults, college level students and even internationals go through this program, who have completed class 12. The program allows students to earn college credit for that knowledge which they have acquired outside the classroom.

3. **External Diplomas for Adults** – Adults obtain their credentials in this manner. This program asks students to show/depict their capabilities in assignments completed at home or during their visits to offices.

4. **Adult Education Opportunities Abroad** – People also tend to go to foreign countries to complete their education. Programs are of various kinds from certificate, associate and graduate level programs.
5. Evening Programs – Adults who are employed and have families often enroll into evening programs to complete their education. Evening programs are convenient because their education can be completed in lesser duration of time.

6. Enrichment Courses – Adults also get enrolled to pursue these courses such as personality development, courses to enhance ones communication skills, stress management, time management and so forth. These are low in cost and classes take place in recreational centers, neighboring schools and churches.

7. Public School System Adult Education Programs – There are public schools in various districts and communities that offer programs for adults in accordance with their needs and abilities. For an individual, it is vital that the program should be manageable and he should not face any severe difficulties while pursuing the program. One should always get enrolled into that kind of program that best suits his requirements.

8. Colleges offering Adult and Continuing Education Programs – There are various colleges and institutions that offer programs in art, music, continuing education and so forth. Adults should get enrolled into such kind of programs with which they would like to pursue their careers. For example, if an adult would like to become an educator and teach children then he would opt for a program in teaching or education. If an individual finds a program challenging and beyond his reach then that proves to be disappointing (U.S. Dept of State, n.d.).

Conclusion
The organization and administration of Adult Education is extremely necessary to get carried out effectively. This concept is becoming common not only in India but in other countries of the world as well such as United States, Japan, Vietnam, Singapore and so forth. Adults are the future and present citizens of the country in which they reside. Development and progress of the nation is entirely dependent upon the development and progress of the adult citizens. Education has been viewed as the most vital means for enhancing the capability, mindset and leading towards the overall development of the adults. The organization and administration of this area has been recognized through a number of schools, colleges, institutions, societies, associations as well as churches that have initiated programs in various fields such as communication, Science, English, Arts, Social Science, languages, music, dance and so forth. There has been an understanding of what are the leadership theories, because to transform adults into mature and educated human beings, it is essential for the educators to be good leaders. These institutions, programs and theories have served as a boon to adult learners so that they could live a better
lifestyle, gain something and contribute towards the goodwill of their families, society as well as the country.

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Retrieved April 29, 2012 from [www.wvde.state.wvus](http://www.wvde.state.wvus).
THE RELATIONSHIP BETWEEN ORGANIZATIONS’ ACQUIRED KNOWLEDGE, SKILLS, ABILITIES (SKAS) AND SHAREHOLDERS WEALTH MAXIMIZATION: THE MEDIATING ROLE OF TRAINING INVESTMENT

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Abstract:
The study looked at the relationship between organizations’ acquired knowledge, skills, abilities and shareholders wealth with training playing the mediating role. The sample of the study consisted of organizations that spent 10% or more of its annual budget on training and those whose training budget is less than 10% of the organization’s annual budget. A total of 620 questionnaires were distributed to employees working in various organizations out of which 580 representing 93.5% were retrieved. The respondents that constitute the sample were drawn using convenience sampling. The researchers used Regression models for their analyses with the help of SPSS 16.0. Analyzing multiple models, it was discovered that organizations training investment plays a considerable indirect and direct effect with partial mediation between organizations acquired skills, knowledge, abilities and shareholders wealth. Shareholders should allow their agents to invest part of their holdings to develop the human capital of the organization but this should be done with caution since shareholders returns do not depend much on how much organizations spend in developing its human resource capital.

Keywords: skills, knowledge, abilities, shareholders wealth, training investment

1.0 Introduction
All organizations no matter its size cannot operate on smoothly without training. This means that training investment is crucial for organizations. According to the World Bank (1991), training schools established by various organizations for training their employees have become necessary because public institutions such as universities, polytechnics, technical and vocational have established little working relations with employers. On the basis of this, employers find it difficult to get the exact skills, knowledge and abilities
they need since these public institutions have not been able to respond to their exact needs by providing
them with the labour force that will suit exactly their requirements. It is on the basis of this that most
multinational companies in Ghana are investing in their employees by establishing training schools within
their organizations which aim at equipping their employees with the exact skills, knowledge and abilities
that fits their culture.

If organizations want to use employees to maximize shareholders wealth, they cannot rely solely on the
skills and knowledge that public or private educational institutions had helped employees to acquire.
These skills and knowledge do not fit into the culture as well as the core values that drive the organization
forward. It is on the basis of this that many human resource practitioners are of the view that despite the
employee receiving formal education, for an organization to improve its performance, tailored made
training that focus on strategic directions of the organization should be provided. Nickel et al (2002) in
support of training investment commented that investors are now recognizing the importance of
organization’s acquired skills and knowledge and its relevance to managers who manage their
investments. To them, an organizational training investment data is one of the criteria investors consider
which organizations they need to invest. This is based on the assumption that, the higher the training
investment data of an organization, the more skilful and knowledgeable their managers are and as such
it is believed that they have all the abilities to manage shareholders funds effectively.

Despite the support that many writers throw on training investment, there are others who also belief
that most training programmes of organizations are routine and they are not tailored towards improving
employees skills and knowledge, hence has no correlation with shareholders wealth. Just like any
other investments engaged by Finance Managers, if organizations training investment does not improve
the needed skills, knowledge and abilities of employees, the associated cost of such investment will not
be accounted for and hence has the tendency of diluting shareholders wealth in the long run.

Organizations that spend huge amount of money training their employees may not recognize any benefit
from the training especially if the employees do not stay long after the training and if this happens
managers will find it very difficult to account for shareholders money which they spend on the training.
Again, many people also believe that training investment does not improve the needed skills and
knowledge and hence dilutes shareholders wealth simply because proper needs assessment which is one
of the phases of any training may not be done by managers. If managers select the wrong employees for
training, then transfer of knowledge as well as application of newly acquired skills becomes difficult
since it is possible that such employees may not apply what they had learned from the training. If transfer
of knowledge and application of skills acquired from the training is not forthcoming, then shareholders
money can be said to have been thrown away and this affects the profitability of the firm.

Looking from these two scenarios with regard to the mediating role training investment play between
organization’s acquired knowledge, skills, abilities and shareholders wealth maximization, one is tempted
to investigate the relationship between these two variables with training investment serving as the mediator. It is believed that if an organization’s training investment brings the needed knowledge, skills and abilities that employees need, then all things been equal, high profitability is expected and hence shareholders wealth maximized. If opposite is the case, then it is expected that shareholders wealth will be affected since training cost cannot be accounted for.

2.0 Literature review

Many writers have commented that training should not be seen as cost but rather an investment provided it facilitates the acquisition of knowledge, skills and abilities needed by employees to perform their job satisfactorily. According to the American Society for Training and Development (ASTD), (2010) quoted by Heathfield (2012), though many businesses are not favoured by economic conditions, business leaders still continue to commit huge sums of money in training because they need to improve the knowledge and skills of their employees. The ASTD estimates that about US$125.88 billion were invested in employees by means of training in 2009. Out of this total figure, according to them about two-thirds of the amount which is US$78.61 billion were spent on internal learning function whilst US$47.27 billion were allocated to external services. Looking at such huge sums of money spent on training, there is no doubt that organizations are reaping benefits from such investments through the improvement of employees’ skills and knowledge. Again this can also be evident from a comment made by them that the best award winning organizations are those that have all the needed skills and knowledge needed to achieve both short term and long term objectives.

From the words of Grobler et al (2006), employee training investment is a big business in many countries such as South Africa. According to them, training costs is estimated to be R5 billion per year. The writers see employee training as investment since it is a key factor in meeting the employer’s strategic, business and operational goals. The writers also emphasized that technological advances as well as social, political and economic pressures mean that an organization cannot do away with training. This is one of the main reasons why training is seen as vital in the mining and manufacturing industries in Ghana. In the mining industry of Ghana, training is one of the tools used to avoid non compliance of both domestic and environmental laws as well as health and safety laws which help the mining industry to avoid financial penalties associated with mistakes and unorthodox practices by its employees. It is believed that if these investments in training are not done, the financial penalties associated with it as a result of mistakes and unorthodox practices by employees can add to the cost of these companies and this has implications on shareholders wealth in terms of dilution.

Looking at the words of Huselid (1995), training is considered as very important to organizations such that the main problem facing organizations is not whether there should be training or not but rather the problem is which employees should be trained and what methods should be used to train them. From this statement, one can point out that if organizations face the problem of who should be trained, then those who are not in favour of an organization’s training investment playing a mediating role between
employees’ knowledge, skills, abilities and shareholders wealth maximization can argued that it is proper for shareholders who want returns on their investment to kick against training investment since proper training needs assessment is one of the ingredients needed for training benefits to be realized. Again, if organizations cannot identify the right people to be trained, then transfer of knowledge acquired from the training becomes difficult and this has serious implications on shareholders wealth since it will add to cost of the organization which will intend affect productivity and profit.

Training is not considered as important only to organizations owned by private individuals but to nations and various governments who are considered as the major employer in many countries. For instance according to Grobler et al (2006), the passage of various Acts in relation to enhancing workers skills and knowledge by the South African government indicates the seriousness nations place on training investment. Some of these Acts according to the writers include the South African Qualifications Authority Act, No. 58 of 1995, the Skills Development Act, No. 97 of 1998 and the Skills Development Levies Act, No. 9 of 1999. In Ghana, majority of the government institutions such as the Ghana Police Service, Bank of Ghana, Prisons Service, Ghana Broadcasting Corporation and others have their own training centres and huge amount of money is allocated to these training centres with the belief that the returns derive from sharpening employees’ skills and knowledge will far outweigh the cost associated with it.

From the words of Barney (2005), one of the reasons why companies spent huge sums of money investing in training is that it serves as a means of achieving competitive advantage as a result of the acquisition of certain unique skills and knowledge which are not available to competitors. According to the writer, one of the companies that have used training to achieve this advantage is the Southwest Airlines. The writer sees this airline as one of the major airlines that have remained profitable after the September 11 tragedy. To him, the ability of the company to retain its customers is based on the excellent and quality services provided by its workers, thanks to the company’s training playing a mediating role.

Apart from Southwest Airlines which is benefiting a lot from training investment, there are companies which cannot be left out as pointed out by Bateman and Snell (2000). According to the writers, companies such as Motorola, General Motors and International Business Machines (IBM) have invested over billions of dollars in training. The returns on the training enjoyed by these companies far exceed the amount that was invested. In support of this assertion, they emphasized that Motorola has been gaining US$30 on every US$1 invested in training. Going by this comment, it means that training investment is seen as a big business which has positive correlation with shareholders wealth. Alan (2009) adding his voice to the relationship between organization’s acquired knowledge, skills, and shareholders wealth maximization with training serving as a mediating role, training yields dividends but it is not easy to measure them in monetary terms. The dividends provided by training can be noticed in terms of increased in productivity, improved communication and participation, reduced labour turnover as employees now have the skills and knowledge to fit into their positions, waste reductions as less
errors are committed by employees and reduction in accidents.

From the words of Devanna et al (2005), Guest (2009) as well as Wright and Taylor (2004), training mediates acquisition of knowledge and skills and firms’ performance. Whilst Devanna et al (2005) see training as increasing individual performance which is believed to lead to higher firm performance, Wright and Taylor (2004) believes that human capital is considered as very important and if an organization does not have the right skills and knowledge, it will be very difficult for that organization to achieve its goals which is mostly geared towards profit maximization. Other writers who have also contributed to acquisition of knowledge, skills and shareholders wealth maximization with training playing a mediating role are Bottomley (2000), Cole (1996), Beach (2004), Pratt and Bennet (2001), Crane (2002) and Graham and Bennet (2001). According to Bottomley (2000), the fundamental purpose of training is to provide for the organization’s manpower needs. This writer in support of Beach (2004) is of the view that organizations spend huge sums of money advertising and recruiting from external but at the end, these cost associated with the recruitment and selection process cannot be recovered if the newly recruited employee does not stay in the organization for long.

As a means of reducing recruitment and selection cost which also adds to the cost of the organization and hence dilution of shareholders wealth, it is important for organizations to first consider investing in their existing employees by means of training so that they can occupy vacant positions. Their arguments also points to the fact that, getting skilled and knowledgeable employees to fill vacant positions serve as a means of intrinsic motivation for employees to put up their best so that in future they can be considered. Second, such employees are already familiar with the culture and customs of the organization and as such the propensity that they will stay in their new positions is higher than those recruited externally since their expectations may not be what they find on the job.

Looking at a comment by the American Bankers Association on the role of training investment on firm’s performance, they emphasized that Chief Learning Officers have a significant leadership responsibility to see that workplace learning and development dollars are spent in ways that support business goals and yield the greatest return to the organization. They concluded that training investment is becoming something which organizations cannot do without in the banking industry since it is seen as one of the greatest investment which an organization can make. From their point of view, training investment lead to improved performance of banks through gains in quality, customer satisfaction, productivity, profitability, and dividends for limited liability companies. Many of the Banks in Ghana such as Standard Chartered, Barclays, Ghana Commercial, Ecobank have all established training centres which aimed at training their employees. The establishment of these training centres aimed at equipping the skills and knowledge of employees proves that, the responsibility of ensuring increase in companies sales, profit and dividends are not left to the Finance Manager or Operations Manager but Training Managers who should ensure that training offered to employees equipped them with the necessarily skills, knowledge and abilities for those variables to be realized.
Though many writers have argued in favour of training investment playing mediating role of organization’s acquired skills, knowledge, abilities correlating positively to shareholders wealth maximization, according to Gall et al (2002), an organization’s training investment does not necessarily bring the acquisition of knowledge and skills which will correlate positively to shareholders wealth. Their arguments point to the fact that, there are many hidden motives why organizations invest in training rather than training the employee to acquire the needed skills and knowledge. Secondly, much depends on the employee’s preparedness and willingness to acquire the knowledge and skills which the training is meant. This means that training itself does not automatically lead to the acquisition of skills and knowledge but other factors need to come into play before the organization’s needed skills and knowledge can be realized. The literature by Howe (2004) supports the argument given by Gall et al (2002) that training itself does not necessarily bring acquisition of skills and knowledge since organizations have different reasons why they invest in training and not necessarily to improve employees’ skills and knowledge. To the writer, if the training is meant to enable employees release stress by taking time off the job to go for external training programme which is not tailored to the employees need, then the argument that an organization’s training investment plays a mediating role of organization’s acquired skills, knowledge and abilities needs to be questioned.

From the above literature review and the arguments of training investment playing the mediating role of organization’s acquired skills and knowledge and shareholders wealth maximization, one can set the following hypotheses:

H1: There is significant relationship between organization’s acquired skills and productivity.
H2: There is significant relationship between organization’s acquired knowledge and productivity.
H3: There is significant relationship between organization’s acquired abilities and productivity.
H4: There is significant relationship between organization’s acquired skills and profitability.
H5: There is significant relationship between organization’s acquired knowledge and profitability.
H6: There is significant relationship between organization’s acquired abilities and profitability.
H7: There is significant relationship between organization’s acquired skills and dividends.
H8: There is significant relationship between organization’s acquired abilities and dividends.
H9: There is significant relationship between organization’s acquired skills and shareholders wealth.
H10: There is significant relationship between organization’s acquired knowledge and shareholders wealth.
H11: There is significant relationship between organization’s acquired abilities and shareholders wealth.
H12: There is significant relationship between organization’s acquired abilities and shareholders wealth.
H13: There is mediation between productivity and organizations’ training investment.
H14: There is mediation between profitability and organization’s training investment.
H15: There is mediation between dividends and organization’s training investment.
H16: There is mediation between shareholder’s wealth and training investment.
Looking at the literature review and the hypotheses set, it is possible for the researchers to develop a conceptual model for the dependent variables, independent variables and the moderator variable as follows:

The above conceptual model means that organizations acquired skills, knowledge and abilities comes into existence through the organization's investment in training and this will in turn maximizes shareholders wealth as a result of increase in productivity, profit and high declaration of dividends.

2.1 Definition of variables as used in the study
In order for us to be clear about the definitions of different terms which will also be used throughout the study, the researchers looking at various literature defined the terms or variables used for the study. Organizations acquired knowledge refers to the theoretical or practical understanding of a subject. For example, an employee might have knowledge of ADDIE model used in instructional design. This does not mean the employee have skills in the application of the model when it comes to designing training programmes at the workplace. Organizations acquired Skills are the proficiencies developed through training or experience. For example using the ADDIE example, the employee must demonstrate skills in applying the ADDIE model when designing training programmes. Organizations acquired abilities are the competence to perform an observable behavior or a behavior that results in an observable product. Productivity is the average measure of the efficiency of production. Profitability is the ability of a business to earn profit or revenue exceeding total cost. Dividends refer to the payment made by organizations to its shareholders, usually as a distribution of profits. Shareholders wealth maximization is the process that increases the current net value of business or shareholder capital gains, with the objective of bringing in the highest possible return

3. Methodology
Though the researchers could not cover all the companies that are owned by shareholders in Ghana, a multiple case study approach which covers a significant number of companies were adopted by the researchers. These companies were drawn from mining, beverage; breweries and filtered water industries. The population of the study covers a wide range of professionals and this includes account officers, personal secretaries, managers, computer operators, complaint officers, customer relation officers, production workers, heads of department, human resource managers, internees, information technology engineers, information technology officers, corporate lawyers, mechanics, corporate medical doctors, marketing officers and public relation officers. The purpose of targeting these categories of employees is to make generalization of the research findings easier.

3.1 Sampling techniques
The researchers adopted a multi-stage sampling technique for the study. Talking about the first stage, different organizations were conveniently selected. At the second stage, the population of these organizations amounting to 3,285 was divided into two strata namely organizations (Study 1) that spent 10% or more of their total annual budget on staff training and those (Study 2) that spent less than 10% of their total annual budget training their staff. The researchers decided to choose 10% because from the literature of Taylor and Bogdan (1984) any serious organization that want to develop its human capital should not spend less than 10% of its annual budget on employee training. Looking at the third stage, the researchers selected a total of 620 employees out of 3,285 drawn from these organizations using convenience sampling technique.

The data collection instrument used was questionnaires which were distributed to the selected number of employees from study 1 and 2 but 580 questionnaires representing 93.5% response rate was recorded. The distribution of respondents for both Study 1 and 2 can be seen from table 1:

<table>
<thead>
<tr>
<th>Respondent type</th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥10% annual budget on training</td>
<td>290</td>
<td>330</td>
</tr>
<tr>
<td>No of responses (response rate)</td>
<td>280</td>
<td>300</td>
</tr>
</tbody>
</table>

For both study 1 and 2, the researchers used the same questions with the same scale to solicit responses from the respondents. Responses were coded as 5=strongly agree to 1=strongly disagree. Data from the questionnaires were analyzed using SPSS 16.0 version. Regression analysis was also used to test if there is mediation among the independent and the dependent variables.
4. **Data Presentation and Analysis**

The main objective underlying the study is to assess the relationship between organizations’ acquired knowledge, skills, abilities (SKAs) and shareholders wealth maximization with training investment serving as the mediating role. Before presenting and analyzing the data, the researchers decided to conduct normality test to check if the data is normally distributed with no extreme values and outliers in data set. It was found out through the test conducted that the value of Skewness was 0.85 which is within -1 to +1. Talking about the value of Kurtosis test conducted, the study recorded 7.65, which shows normality in the data set.

In finding out the mean and standard deviation for each of the variables used for the study, the test run based on the data gathered from the questionnaire revealed the following:

**Table 2. Descriptive statistics:**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Study 1: ≥10% annual budget</th>
<th>Study 2: &lt;10% annual budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. deviation</td>
</tr>
<tr>
<td>Organization acquired</td>
<td>3.5</td>
<td>0.82</td>
</tr>
<tr>
<td>skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization acquired</td>
<td>3.2</td>
<td>0.89</td>
</tr>
<tr>
<td>knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization acquired</td>
<td>3.6</td>
<td>0.86</td>
</tr>
<tr>
<td>abilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td>3.6</td>
<td>0.77</td>
</tr>
<tr>
<td>Profitability</td>
<td>2.9</td>
<td>0.74</td>
</tr>
<tr>
<td>Dividends</td>
<td>2.8</td>
<td>0.84</td>
</tr>
<tr>
<td>Shareholders wealth</td>
<td>2.7</td>
<td>0.92</td>
</tr>
</tbody>
</table>

The above table shows the mean and standard deviation for each item for both studies. The mean values, as seen from table 2 indicates that profitability, dividends and shareholders wealth are lower than the average 3.0 for both studies. Looking at organization’s acquired skills, knowledge and abilities as well as productivity, they are above the average of 3.0.

In looking at the relationship between the variables, correlation analysis was conducted based on the data retrieved from the questionnaires distributed to the respondents. The table below shows the kind of relationship that exists between the variables in both studies.
Table 3: Correlation coefficient of study 1 (≥ 10% annual budget on training)

<table>
<thead>
<tr>
<th>Organization acquired knowledge (OAK)</th>
<th>OAK</th>
<th>OAS</th>
<th>OAA</th>
<th>OTI</th>
<th>PDT</th>
<th>PRO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization acquired skills (OAS)</td>
<td>1</td>
<td>.488*</td>
<td>.197*</td>
<td>.186*</td>
<td>.115*</td>
<td>.030*</td>
</tr>
<tr>
<td>Organization acquired abilities (OAA)</td>
<td>.488*</td>
<td>1</td>
<td>.126*</td>
<td>.057*</td>
<td>.184*</td>
<td>.039*</td>
</tr>
<tr>
<td>Training investment (OTI)</td>
<td>.197*</td>
<td>.126*</td>
<td>1</td>
<td>.547**</td>
<td>.316**</td>
<td>-.024**</td>
</tr>
<tr>
<td>Productivity (PDT)</td>
<td>.115*</td>
<td>.184*</td>
<td>.316**</td>
<td>1</td>
<td>.430**</td>
<td>.462**</td>
</tr>
<tr>
<td>Profitability (PRO)</td>
<td>.038**</td>
<td>.039*</td>
<td>-.024**</td>
<td>.462**</td>
<td>1</td>
<td>.334**</td>
</tr>
<tr>
<td>Dividends (DVD)</td>
<td>.135**</td>
<td>.348**</td>
<td>.195**</td>
<td>.167*</td>
<td>.141*</td>
<td>1</td>
</tr>
<tr>
<td>Shareholders wealth (SHW)</td>
<td>.124**</td>
<td>.166*</td>
<td>.018*</td>
<td>.016*</td>
<td>.038*</td>
<td>.112*</td>
</tr>
</tbody>
</table>

**. Correlation is Significant at 0.01 level (2 tailed)
*  . Correlation is Significant at 0.05 level (2 tailed)
Table 4: Correlation coefficient of study 2 (< 10% annual budget on training)

<table>
<thead>
<tr>
<th>Organization acquired knowledge (OAK)</th>
<th>OAS</th>
<th>OAA</th>
<th>OTI</th>
<th>PDT</th>
<th>PRO</th>
<th>DVD</th>
<th>SHW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization acquire skills (OAS)</td>
<td>1</td>
<td>.486**</td>
<td>.193**</td>
<td>.188*</td>
<td>.219**</td>
<td>.055**</td>
<td>.138**</td>
</tr>
<tr>
<td>Organization acquired abilities (OAA)</td>
<td>.486**</td>
<td>1</td>
<td>.122*</td>
<td>.052*</td>
<td>.382*</td>
<td>.020*</td>
<td>.342**</td>
</tr>
<tr>
<td>Training investment (OTI)</td>
<td>.193**</td>
<td>.122*</td>
<td>1</td>
<td>.542**</td>
<td>.391**</td>
<td>.410**</td>
<td>.193**</td>
</tr>
<tr>
<td>Productivity (PDT)</td>
<td>.188**</td>
<td>.052*</td>
<td>.542**</td>
<td>1</td>
<td>.410**</td>
<td>.455**</td>
<td>.153**</td>
</tr>
<tr>
<td>Profitability (PRO)</td>
<td>.219**</td>
<td>.382*</td>
<td>.391**</td>
<td>.410**</td>
<td>1</td>
<td>.291**</td>
<td>.132**</td>
</tr>
<tr>
<td>Dividends (DVD)</td>
<td>.133**</td>
<td>.020*</td>
<td>.410**</td>
<td>.455**</td>
<td>.291**</td>
<td>1</td>
<td>.324**</td>
</tr>
<tr>
<td>Shareholders wealth (SHW)</td>
<td>.138**</td>
<td>.342**</td>
<td>.193**</td>
<td>.153**</td>
<td>.132**</td>
<td>.324**</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is Significant at 0.01 level (2 tailed)
*. Correlation is Significant at 0.05 level (2 tailed)

The Tables above (3 & 4) show the correlation analysis results for both study 1 and 2. Correlation analysis gives the relationship that exists among variables. If there is strong relationship among variables, one can interpret it as high correlation existing among those variables. Organization acquired knowledge, skills and abilities are positively correlated with organization’s productivity (r= .115**, p<0.01), (r= .184*, p<0.05), (r= .316**, p<0.01) respectively for study 1 and (r= .219**, p<0.01), (r= .382*, p<0.05), (r= .391**, p<0.01) respectively for study 2. Hence, hypothesis1, 2 and 3: There is positive relationship between organizations acquired knowledge, skills, abilities and productivity had been proved. Literature also supports there is positive relation between those independent variables and productivity as
can be witnessed in the literature provided by Cho et al (2006), Huang (2000) and Pine and Judith (1993)

Though there is positive relationship between the independent variables and productivity, both studies recorded a weak relationship existing among the variables. This means that taking the co-efficient of determination \( r^2 \) into consideration; organizations acquired knowledge, skills and abilities only contribute 1.32%, 3.39%, 9.99% respectively to organizations productivity when it comes to study 1 whilst for study 2, it was 4.80%, 14.60%, 15.29% respectively. The above presentation shows that there are other variables that play significant role in determining the productivity of organizations. Employees may have all the required knowledge, skills and abilities but both intrinsic other than organizations training and extrinsic motivation is necessary for the application of these independent variables by employees. Organizations also need to provide all the necessary logistics as well as conducive environment for employees to apply these independent variables. If these are missing, application becomes difficult and hardly will it have significant contribution in terms of improvement in work of the employee.

Talking about the relationship between organizations acquired knowledge, skills, abilities and profitability, there exist positive correlation between the independent variables and the dependent variable except the relationship between organizations acquired abilities and profitability which recorded negative relationship for study 1 as can be witnessed in Table 3 \((r= .030^{**}, p<0.01)\), \((r= .039^*, p<0.05)\), \((r= -.024^{**}, p<0.01)\) respectively. For Table 4, the relationship between all the independent variables and the dependent variable recorded positive relationship \((r= .055^{**}, p<0.01)\), \((r= .020^*, p<0.05)\), \((r= .410^{**}, p<0.01)\) respectively for study 2. From this, one can say that hypothesis 4 and 5: There is positive relationship between organizations acquired knowledge and skills had been proven. Looking at hypothesis 6, whilst it holds in study 2, it was not proven in study 1. The above presentation tells us that though organizations in study 1 spend 10% or more of its annual budget on employees training, the relationship between organizations acquired abilities and profitability is negative as opposed to study 2. Literature from Chapman (1993) and Gelade and Ivery (2003) support the assertion that it is not the quantum of money that organizations spend on its training programme that will increase its profit but several factors such as the ability to control or minimize cost in all areas of the organization will go a long way to determine the profitability of an organization. From this literature, it means that though organizations in study 1 might spend more on training as compared to organizations in study 2, the ability of organizations in study 2 to develop a cost conscious culture in their organization will help boost their profits rather than relying mainly on training as a means to increase profits.

The relationship between the independent variables, organizations acquired knowledge, skills, abilities and the dependent variable (dividends) recorded positive relationships as can be witnessed in table 3 for study 1 \((r= .135^{**}, p<0.01)\), \((r= .348^{**}, p<0.01)\), \((r= .195^{**}, p<0.01)\) and table 4 for study 2 \((r= .138^{**}, p<0.01)\), \((r= .342^{**}, p<0.01)\), \((r= .193^{**}, p<0.01)\). The same situation applies to the relationship between
the independent variables and shareholders wealth for both studies as can be witnessed in tables 3 and 4. The above presentation proves the hypotheses 7, 8 and 9 that there are positive relationships between organizations acquired knowledge, skills and abilities respectively and dividends declared to shareholders. Hypotheses 10, 11 and 12 was also proven that there is positive relationship between organizations acquired knowledge, skills, abilities respectively and shareholders wealth maximization. The literature from Ahmad & Schroeder (2003); Fey, Björkman and Pavlovskaya (2000); Garcia (2005) and Khatri (2000) support hypotheses 7, 8, 9, 10, 11 and 12 that there is positive relationship between the independent variables (organizations acquired knowledge, skills and abilities) and the dependent variables (dividends; shareholders wealth). Though these authors’ support that such relationship exists among the variables, Ahmad & Schroeder (2003) and Garcia (2005) were of the view that an organization cannot claim strong relationship among those variables and as such dividends attributed to equity shareholders does not depend significantly on how much the organization spend on its training. Their argument is based on the fact that an organization can spend huge sums of money to train their employees but the dividends that the organization will declare does not depend on how much was invested in employees by means of training. To them training can be used to improve the skills and knowledge of employees for profitability of the organization to be improved but the dividends declared attributable to equity shareholders will depend on a number of factors such as the organization’s dividend policy and availability of cash. For instance, an organization’s training can be successful for profitability to be improved but if majority of the organization’s sales are on credit basis, it may lack cash for dividends to be declared and paid to equity shareholders for their wealth to be maximized. It therefore sounds good idea for companies to regulate how much they spend on their training investment since it is not a significant contributor to declaring huge dividends to equity shareholders for their wealth to be maximized.

4.1 Testing for Mediation using Regression
Mediation is a hypothesized causal chain in which one variable affects a second variable that, in turn, affects a third variable. The intervening variable, assuming ‘M’, is the mediator. It “mediates” the relationship between a predictor, X, and an outcome as can be represented in figure 1 below:

```
   c
  /   \
 X --a-- M --b-- Y
```

In figure 1, path ‘a’ and ‘b’ are direct effect. A meditational effect in which ‘X’, the independent variable leads to Y, the dependent variable through ‘M’ the mediator variable is called indirect effect. It is obvious that without identification of an indirect effect, mediation is incomplete.

According to Baron and Kenny (1986), a four step approach where several regressions have to be run and significance of regression co-efficient determined at each step is required for mediation testing to be
complete. The mediation test conducted for the study using the approach of Baron and Kenney (1986) produced the following results as can be seen in Table 5:
Table 5. Regression Models

<table>
<thead>
<tr>
<th>Study</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDT=α + β₁ OAK + β₂ OAS + β₃ OAA + ε</td>
<td>1</td>
<td>.178</td>
<td>.166</td>
</tr>
<tr>
<td>2</td>
<td>.175</td>
<td>.180</td>
<td>13.32</td>
</tr>
<tr>
<td>PRO=α + β₁ OAK + β₂ OAS + β₃ OAA + ε</td>
<td>1</td>
<td>.129</td>
<td>.116</td>
</tr>
<tr>
<td>2</td>
<td>.128</td>
<td>.117</td>
<td>10.24</td>
</tr>
<tr>
<td>DVD=α + β₁ OAK + β₂ OAS + β₃ OAA + ε</td>
<td>1</td>
<td>.032</td>
<td>.015</td>
</tr>
<tr>
<td>2</td>
<td>.033</td>
<td>.014</td>
<td>3.12</td>
</tr>
<tr>
<td>SHW=α + β₁ OAK + β₂ OAS + β₃ OAA + ε</td>
<td>1</td>
<td>.052</td>
<td>.036</td>
</tr>
<tr>
<td>2</td>
<td>.054</td>
<td>.037</td>
<td>4.46</td>
</tr>
</tbody>
</table>

Simple Regression, I.V predicting D.V for path c only

Simple regression analysis with all I.V predicting mediator variable for identification of path a:

<table>
<thead>
<tr>
<th>Study</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTI= α + β₁ OAK + ε</td>
<td>1</td>
<td>.020</td>
<td>.017</td>
</tr>
<tr>
<td>2</td>
<td>.021</td>
<td>.018</td>
<td>6.20</td>
</tr>
<tr>
<td>OTI= α + β₁ OAS + ε</td>
<td>1</td>
<td>.003</td>
<td>.001</td>
</tr>
<tr>
<td>2</td>
<td>.005</td>
<td>.002</td>
<td>.660</td>
</tr>
<tr>
<td>OTI= α + β₁ OAA + ε</td>
<td>1</td>
<td>.505</td>
<td>.214</td>
</tr>
<tr>
<td>2</td>
<td>.503</td>
<td>.215</td>
<td>70.14</td>
</tr>
</tbody>
</table>

Simple Regression Analyses with mediator variable predicting D.V for identification the significance of path b:

<table>
<thead>
<tr>
<th>Study</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDT= α + β₁ OTI + ε</td>
<td>1</td>
<td>.535</td>
<td>.160</td>
</tr>
<tr>
<td>2</td>
<td>.544</td>
<td>.162</td>
<td>48.90</td>
</tr>
<tr>
<td>PRO= α + β₁ OTI + ε</td>
<td>1</td>
<td>.026</td>
<td>.023</td>
</tr>
<tr>
<td>2</td>
<td>.027</td>
<td>.024</td>
<td>6.96</td>
</tr>
<tr>
<td>DVD= α + β₁ OTI + ε</td>
<td>1</td>
<td>.012</td>
<td>.041</td>
</tr>
<tr>
<td>2</td>
<td>.021</td>
<td>.042</td>
<td>.002</td>
</tr>
<tr>
<td>SHW= α + β₁ OTI + ε</td>
<td>1</td>
<td>.006</td>
<td>.001</td>
</tr>
<tr>
<td>2</td>
<td>.004</td>
<td>.001</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Multiple Regression Analyses with I.V and mediator, predicting D.V in order to identify significance of path c’:

<table>
<thead>
<tr>
<th>Study</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDT= α + β₁ OAK + β₂ OAS + β₃ OAA + β₄ OTI + ε</td>
<td>1</td>
<td>.240</td>
<td>.223</td>
</tr>
<tr>
<td>2</td>
<td>.242</td>
<td>.224</td>
<td>15.45</td>
</tr>
<tr>
<td>PRO= α + β₁ OAK + β₂ OAS + β₃ OAA + β₄ OTI + ε</td>
<td>1</td>
<td>.142</td>
<td>.125</td>
</tr>
<tr>
<td>2</td>
<td>.144</td>
<td>.123</td>
<td>8.11</td>
</tr>
<tr>
<td>DVD= α + β₁ OAK + β₂ OAS + β₃ OAA + β₄ OTI + ε</td>
<td>1</td>
<td>.023</td>
<td>.011</td>
</tr>
<tr>
<td>2</td>
<td>.013</td>
<td>.011</td>
<td>1.68</td>
</tr>
<tr>
<td>SHW= α + β₁ OAK + β₂ OAS + β₃ OAA + β₄ OTI + ε</td>
<td>1</td>
<td>.054</td>
<td>.035</td>
</tr>
<tr>
<td>2</td>
<td>.055</td>
<td>.036</td>
<td>2.80</td>
</tr>
</tbody>
</table>
A summary of mediation test from table 5 indicates that all independent variables (organizations acquired knowledge, skills, and abilities) have significant indirect effect with dependent variables (productivity, profitability, dividends, shareholders wealth) at path ‘a’. Looking at path ‘b’, one can see that all the dependent variables have indirect effect with the mediator variable. Lastly, all the independent and moderator variable significantly predict dependent variable at path c.

The above presentation from that table indicates that in effect, there is full direct and partial indirect mediation existing among the study variables.

6.0 Conclusion
On the whole, the study provides a new theoretical direction towards understanding that, if an organization’s training investment achieves it desired objective of improving employees’ knowledge, skills and abilities, it should correlate positively with shareholders wealth. It also revealed experiential backing of positive outcomes of a well planned and executed organization’s training investment as a mediator. Despite the positive outcomes, shareholders should carefully monitor how much investment their agents (managers) have allocated for training since though training mediates organization’s acquired skills, knowledge, abilities and shareholders wealth, the contribution of these independent variables when they are acquired to the maximization of the wealth is weak.

7.0 Theoretical and empirical contributions
The study has looked into the relationship between organizations acquired knowledge, skills, abilities and productivity, profitability, dividends and shareholders wealth. Theoretical contributions claim that if organizations are to improve on productivity, they need to invest in their human capital as that is the only way by which employees knowledge can be enhanced to render better service or produce quality products (Krueger & Rouse, 1998), Katou & Budhwar (2007), Ghebregiorgis & Karsten (2007). When employees acquire the necessary knowledge, it also helps them to develop the needed skills which bring the ability to perform. To the writers especially Ghebregiorgis & Karsten (2007), ‘ability to perform’ results in increase in productivity which is strongly correlated with increase in profit and hence high dividends and shareholders wealth maximized. The current study does not agree entirely with the literature as increasing productivity cannot be claimed to have strong correlation with profit, dividends and shareholders wealth. These variables are determined by several factors which an organization’s ability to develop a conscious culture and a low cost structure play a key role rather than organizations investment in training to enhance employees’ knowledge, skills and abilities.

8.0 Limitation and recommendations for future research
The study made use of convenience sampling technique which is a non probability sampling type and based on that the results of the study cannot be generalized to the whole population since not all members in the population had equal chance to be selected for the study. Secondly, data was collected with the
use of only the questionnaire technique. Combining other techniques such as focus group or interview might have enriched the results.

Again, the study only looked at three independent variables (knowledge, skills, abilities) and its relationship with shareholders wealth. It is believed that there are other variables that play key role in the determination of shareholders wealth based on the weak positive correlation results and as such future research should looked into these other variables and its role in determining shareholders wealth.

Lastly, the researchers could not do higher statistical analysis for the mediation test and it is believed that future research should consider higher statistical analysis such as the use of structural equation modeling to look at the mediation role training investment play between the independent and the dependent variables.

9.0 References


THE EFFECT OF ENVIRONMENTAL UNCERTAINTY AND THE CHARACTERISTICS OF INFORMATION SOURCES ON MANAGERS' USE OF INFORMATION SOURCES FOR MAKING DECISIONS

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Abstract:
Purpose: Identifying the effect of environmental uncertainty and characteristics of information sources on managers' use of information sources for making decision.
Method: The research method is an analytic survey and population includes managers in second industrial area of Ahvaz. The data were gathered using a researcher-made questionnaire.
Findings: The findings showed that managers perceived greater uncertainty in economic (M=7.73) sector. Also managers carried out greater scanning in economic environmental sector (M=7.4). Results show that managers get more use of information from environmental scanning in playing the role of a negotiator. The results proved a significant relationship between the perceived accessibility, perceived quality, and perceived richness of Source and the frequency with which information from that source is used to make decisions. The results also showed a significant relationship between perceived environmental uncertainty and the frequency of information use by managers from sources to make decisions.
Key Words: Managers of Second Industrial Area of Ahvaz, External Environment, Environmental Scanning, Information Sources, Decision Making, Accessibility, Quality, Perceived Richness of Source.

1. Introduction
The major challenges faced by modern organizations are not within the organization but the environment in which they act. Environmental forces influence the peace and stability of an organization. There are many forces in the environment that organizations need to adjust their movements and actions with and/or to direct and influence them by their
desires and goals in an active movement (Sarrafizadeh, 2011). The external environment of every organization is identified by characteristics such as complexity, importance and variability rate. In other words, the external environment of every organization includes several items and sectors (complexity) which constantly change (variability rate) and are important for organizations with different degrees (importance). These characteristics in general bring about uncertainty for managers. This is especially true while managers feel they lack essential information for making decision (Hatch, 2010).

Wilson et al. (2005) believe that uncertainty is the reason for most disabling concerns of individuals, and that human mind is designed to do away with it. Man's life is meaningless without having relationship with facts and realities. The way people perceive acquire facts in their daily lives, shape their insight and theorize in an attempt to transfer from ignorance to awareness to reduce world confusion at a trivial level and to add to its predictability by reducing relevant uncertainty. By documenting to research results, he claims that predictable events, compared to unpredictable ones, produce less intensive stimulation; in other words, decrease of uncertainty might result in decrease of enjoyment. Based on Thomson's theory uncertainty is the main problem of complex organizations and overcoming it is the essence of management process (Schoderbek et al., 2004). Uncertainty is rooted in individuals' disability to interpret a phenomenon or new conditions. Also Ivanov (2009) takes uncertainty a characteristic of a system that explains deficiency of human knowledge about the system and its progress status. Duncan (1972) identifies uncertainty as a characteristic of external environment. Yanes-Este'ves (2006) considers it as an indicator of lack of information about the world of an organization, the way decision-makers perceive it.

Grote (2009) quoted in Pfeffer and Salancik (1978), Sitkin and Pablo (1992), Lipshitz and Strauss (1997), and Wall et al. (2002) define uncertainty as lack of knowledge and inability to perceive reasons and mutual relations, which in the framework of a total decision-making is rooted in deficient information, inappropriate perception of existing information and inability to distinguish substitutes-which are equally attractive. While uncertainty is related to objectives that are to be realized, lack of information can be identified tangibly, but both undistinguishable substitutes and inappropriate perception of existing information are the sources of uncertainty whose identification calls for interaction between the 3 characteristics i.e. decision, decision environment and decision-maker. According to him, it is due to these differences that sometimes deficient information is defined as uncertainty whiles the 2 other factors are placed in another framework called equivocality.

In general, lack of information and equivocality are two important sources of uncertainty. Although the origin of uncertainty or individuals' perception of it might be the same, the effects has on individuals in the organization may not be equal. Daft and Weick (1984) in their perception of organizations as interpretation systems illustrates organization
performance in facing a question or equivocality as performance of a person who participate in the 20 question competition, and each time a question is posed, it provides more information about the phenomenon to the individual. For instance, for an organization seeking to answer what customers demand that organizations cannot supply any more, interviewing samples in the environment, studying the market, testing the marking, creating research center for analyzing tendencies, analyzing content of media, and modeling econometrics for finding answer about external environment can all be part of an organization's activities to find a solution before using up the sources, or entrance of competitors into the market, change of customers' taste, or dominance of binding opportunities in other environmental sectors.

Therefore, as organizations are not created in vacancy, and the consistency of their activities is dependent on the relationship and interaction with events of external environment. Therefore, as Sarrafizadeh (2009) states organizational decision-making requires a structure in which a manager is able to acquire sufficient information about what goes on in the environment. To put it in simple words, depending on information which originates from inside an organization cannot guarantee success of decisions. Evans et al. (2009) believe that some individuals find decision-making difficult since human can hardly ever know all about a particular situation prior to obligation to doing all he wants. Most decision-making situations consist of some variables that have unpredictable interaction (active factors) with each other. Henry Mintzberg (stated in Sarrafizadeh, 2009) enumerates 10 roles for managers in 3 general fields of communication, information and decision-making where a manager solves future problems, identifies objectives and dedicates the sources. Although managers engage in decision-making process at different levels, their decision-making roles are basically related to nonstructural decisions, whose characteristics are unpredictability, existence of plenty of solution and potential responses, vagueness of the approach to gain correct responses, effect of its results on organization's goals, being sensitive to environmental and dynamic conditions of the environment, and great dependence on data from the external environment which force a manager to get use of information about events of the external environment. Information gained from the external and internal sources of an organization is processed and fed into the decision-making cycle by individuals and information system of an organization (Sadegzadeh et al., 2013). Thus, environmental scanning is a process to collect information from external environment of an organization, and its analysis, interpretation and use in making decision by managers. Choo (1993) states that environmental scanning is the acquisition and use of relevant information to events, trends and relations in the external environment of an organization and the knowledge which helps managers in planning future affairs of the organization. Analysis (investigation and evaluation) is very crucial for modern organizations. Environmental scanning is supervising the economic factors, competition, governmental rules, suppliers, technology and market in order to
determine the opportunities and threats they have to an organization. Organizations scan the environment for perceiving external changes forces in a way that might gain effective responses for developing or expanding their position in the future (Ojo, 2008).

Knowing that senior managers' decisions are strategic for an organization which encompasses its future horizon and at the same time face risky problems, managers need information on external environment of an organization to decide about the events of external environment that affect organization's life. This information is issued in a diversity of sources whose use is affected by its particular characteristics.

Accessibility and quality of information in some studies are investigated as effective factors on use of information by managers in environmental scanning (Colnun, 1985; Choo, 1993; Jorosi, 2006; Hosseini, 2010; Farhadpoor, 2013; and Rasuli, 2013) and information systems (Sepehvand and Arefnezhad, 2013).

Choo (1993) defines perceived accessibility of a source as "the amount of time and effort needed to acquire, connect, or locate a source" and "ease of providing appropriate information from source"; and the quality of information from his point of view possess 2 important characteristics i.e. relevance and validity. O'Reilly (1982) believes that relevance together with accuracy, validity, and up-to-datedness is an important dimension of perceived quality of a source. According to Taylor (1986) the quality of a source indicates the sum of its values. Richness of information according to Brunell and Lapierre (2007) is the ability of a medium to transfer special types of information and the capacity of media for immediate feedback, and it involves various clues, engaged senses, and language diversity.

While literature on environmental scanning out of Iran dates back to 1960s, it is only since 2009 that it has received academic attention. Understanding various sectors of external environment by managers can differ due to activity texture characteristics of different companies. Hosseini’s study (2010) on managers of private publications in Tehran shows that economic and customers sectors were more complex, important and variable for managers. In another study Farhadpoor (2011) investigated the environmental scanning behavior of managers in academic libraries noticed that customers, addressees, technology, and socio-cultural sectors were complex, important and more variable with high perceived strategic uncertainty and environmental uncertainty. Also the results showed that managers use a combination of (personal/impersonal) and (internal/external) information sources for environmental scanning, and that they make use of addressees and customers information sources, library sources, electronic information services and subordinate staff more than other sources. Library information sources, reports, internal studies, and accessible information services, electronic information services, addressees and users were perceived to have the greatest quality. Another study by Rasuli (2013) on environmental scanning behavior of managers in private electronic publications of Tehran proved that external environment, and economic sectors were the most important environmental sectors with
highest variability rate and complexity. Also she found a significant relationship between perceived environmental uncertainty and the frequency with which each source was used and the amount of environmental scanning by managers in electronic publications of Tehran. In addition, the results showed that of the information sources, customers were the most important one. Also the subordinate managers were very important and reliable for managers. It is also found that there is a significant relationship between perceived accessibility and perceived quality of an information source and its frequency of use for environmental scanning.

A study by Preble et al. (1988) on environmental scanning by multinational companies in the United States showed that most companies frequently did international scanning within America and a small percentage used consulting services for scanning. Near half for managers reported different levels of using computer in scanning process. Most managers insisted on using internal information sources for international scanning. Most respondents used publications and reports as information sources. Choo (1993) studied the network of the directors of the Canadian communication industry and showed that more strategic uncertainty was perceived in technological, customers and competitors sectors and were perceived the most variable, important and complex by managers; so that the amount of scanning of each environmental sector showed a direct relationship with perceived strategic uncertainty in that sector. Also it is indicated that personal information sources were used more in environmental scanning. It was also found that the accessibility and quality of sources influence their use in environmental scanning. Findings of Casta (1997) on strategic planning and environmental scanning in chain hotels Portugal showed that there was a great difference between perceived strategic planning and the ideal one regarding the strategic planning activities. While the perceived strategies were based on an official design, the ideal strategies used non-official designs. The results also showed that there is a relationship between strategic planning and environmental scanning. Jansen Van Vuuren (2002) studied the environmental scanning of South African organizations on future view of communications and showed that the environmental scanning was a strategic tool for organizations in acquiring competition advantages. Knowledge management and the amount of relationships in communications are very dependent on environmental scanning. Although environmental scanning was being conducted greatly in most organizations, it was not formal, which is the main finding of this study. The effect of environmental scanning on organizations studied was remarkable. Nor Shahriza Abdul Karim (2004) investigated the relationship between environmental scanning and information behavior and introduced a procedure to do environmental scanning. Jorosi's findings on studying (2006) the information needs and information seeking behavior of managers in large, medium, and small-sized companies showed that, managers perceived the information about customers and competitors to be the most important information about their company; they spent much of their time on information seeking behavior and
used personal sources (customers, businesses, associates) and impersonal sources (newspapers, information media, and governmental publications); choice of media was much dependent on accessibility and ease of use and managers used information for important decisions and performing everyday tasks. Pieterson et al. (2008) conducted a study on media richness entitled perception and use of channel (sources): the superior factors of media richness showed that media richness and library sources possessed more perceived richness, respectively, while electronic information services had less perceived richness. Also Wright's study (2008) in the field of media richness entitled use of media richness theory for collecting information showed greater dependence on use of electronic tools in collecting information. Conway (2009) introduced a step by step guide on environmental scanning and states that for doing environmental scanning the scope of following sources can be applied: newspapers, websites, weblogs, wikis, library information sources, podcasts, films, information sites, newsletters, magazines, books, book critics, lectures, reports, surveys, interviews, seminars, chat-rooms, supervisors, advertisement, philosophers, sociologists, business management …business management discussion forums, counselors, researchers, experts, research reports and universities. Nik Muhammad et al. (2009) studied entitled environmental scanning and decision-making quality: information processing perspectives, showed that the quality of information in economic, and competition are directly related to scanning method in those sectors. Zhang's study (2010) entitled environmental scanning: use of information literacy skills in workplace, showed that environmental scanning as an up-to-date alarming system for an organization, helps it to revise business strategies regarding changes in the external environment and improvement of competition. Environmental scanning in the process of information analysis provides the development of information technology and long-distance communication channels of various type and application. In order to find high quality information on environmental scanning to provide strategic decision-making it is important for each employee to be equipped with information literacy skill. Babutunde and Adebisi (2012) conducted a research entitled "Strategic environmental scanning and organization performance in a competitive business environment, Economic Insights" showed that there is a significant relationship between strategic environmental scanning and performance of an organization, and that the instability and change of effective and efficient performance of an organization is due to the change and diversity in strategic environmental scanning. Also the findings proved that the change of production and efficiency in an organization is due to changes of external environmental factors which indicate that the environmental forces out of an organization positively affect the organizational performance. Mayer et al. (2013) investigated more applied supportive environmental scanning systems and analyzed and developed 6 environmental scanning methods.

Review of the related literature indicates that the environment of an organization affects its
emergence, growth, and death. The external environment of an organization is out of control, which simultaneously is able to control the organization. Therefore, for surviving a company, senior managers are supposed to identifying this fluctuating environment and collect necessary information on it and apply in the future decisions of the organization. The relevant information on an environment can be collected from a broad range of information sources. Accessibility, quality and richness of information sources are the characteristics that influence use of a source. Thus, regarding the status of external environment in determining the fate of organizations, the main problem of the present study is to identify the effect of perceived environmental uncertainty and the effective characteristics of information sources in doing environmental scanning and use of its information in making decisions by managers in companies of second industrial area of Ahvaz.

2. Research questions and Hypothesis

In order to identify the effect of perceived environmental scanning and the characteristics of information sources in scanning environment and using the information of sources in making decision by managers in companies second industrial area of Ahvaz the following research questions and hypotheses are posed.

Q1: How is the condition of various external environmental sectors based on perceived uncertainty by managers?
Q2: What decision-making roles do the sample company managers; use the information on external environment?
Q3: How is managers' perception of the characteristics of various information sources?
Q4: With what frequency do managers use the information of each source about external environmental sectors?

Hypotheses:

H1: There is a direct relationship between perceived accessibility, perceived quality and perceived richness of a source by sample managers and the frequency with which environmental information is used in making decision.
H2: There is a direct relationship between sample managers' perceived environmental uncertainty from an information source and the frequency with which environmental information is used in making decision.

3. Research Method

The present study is an analytic survey type whose subjects were all 60 managers of active companies in second industrial area of Ahvaz (21 metallic and 39 nonmetallic) who were selected through census a questionnaire was distributed among them and the responses were collected for analysis. This means that the instrument was a researcher-made questionnaire whose items were prepared using questionnaires of previous items. Having included the variables in research instrument, it was formally sent to 10 professors...
of information science, study of knowledge to be finalized after including their comments. So the reliability of the questionnaire is formal and was found to be 0.918 using SPSS software version 18 which is at an appropriate level. Then it was given to managers in person, and after the collection data, they were analyzed using SPSS software.

Table 1- Variables, relevant questions in the questionnaire and the sources used in items

<table>
<thead>
<tr>
<th>Variable</th>
<th>The number of relevant questions in the questionnaire and its items</th>
<th>Resource/resources used in preparing items</th>
<th>Relevant question or hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived environmental uncertainty</td>
<td>A₂: How much is the variability rate in each environmental sector?</td>
<td>Dunken (1972); Daft et al.(1988); and Choo (1993)</td>
<td>Research questions 1 second hypotheses</td>
</tr>
<tr>
<td></td>
<td>A₃: How much is complexity level in each environmental sector?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information sources and their classification, quality, accessibility, and perceived richness of the source</td>
<td>B₁: How many items each information source is used for environmental scanning?</td>
<td>Aguilar (1967); Saracevic (1970); Keegan (1974); Allen (1977); Zmud (1978); O'Reilly (1982); Culnan (1984); Taylor (1986); Nilan, Peek, Snyder (1988); Halpern, Nilan (1988);Bell et al. (1988); Daft, Surmuten and Parks (1988);Choo (1993);Hosseini (2010);Farhadpoor (2011)</td>
<td>Research questions 3 First hypotheses</td>
</tr>
<tr>
<td></td>
<td>B₂: How relevant is the information in each source about the environment?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B₃: How reliable is the information of each source about the environment?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B₄: How much time and effort is needed to locate and consider information in each source?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B₅: How easy it is to acquire necessary information from each source after encountering or locating them?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B₆: Which source is more up-to-date?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B₇: Which source is accessible interactively and directly to you?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Finding

Q1: How is the condition of various external environmental sector based on perceived uncertainty by managers?

In order to explain the relationship between managers' perception of uncertainty in various environmental sectors and the Mean of variability rate, and the complexity level in each environmental sector, the uncertainty was calculated using the following formula (table 2) and in the second phase using Pearson's Correlation Co efficiency, this hypothesis was tested.

\[ PEU = PV + PC \]

PEU= Perceived Environmental Uncertainty

PV= Perceived variability

PC= Perceived complexity

Table 2- Condition of various sectors of external environment from the viewpoint of managers in second industrial area of Ahvaz based on variability rate and complexity

<table>
<thead>
<tr>
<th>Environmental Sector</th>
<th>Mean of variability rate</th>
<th>SD</th>
<th>Mean of perceived complexity of resources</th>
<th>SD</th>
<th>Mean of environmental uncertainty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>3.54</td>
<td>1.11</td>
<td>3.58</td>
<td>1.027</td>
<td>7.12</td>
</tr>
<tr>
<td>Competitors</td>
<td>3.18</td>
<td>1.024</td>
<td>3.41</td>
<td>0.895</td>
<td>6.59</td>
</tr>
<tr>
<td>Technological</td>
<td>3.48</td>
<td>1.129</td>
<td>3.56</td>
<td>0.943</td>
<td>7.04</td>
</tr>
<tr>
<td>Political</td>
<td>3.48</td>
<td>1.051</td>
<td>3.68</td>
<td>1.013</td>
<td>7.16</td>
</tr>
<tr>
<td>Economical</td>
<td>3.96</td>
<td>1.009</td>
<td>3.77</td>
<td>1.134</td>
<td>7.73</td>
</tr>
<tr>
<td>Socio-cultural</td>
<td>2.25</td>
<td>1</td>
<td>2.43</td>
<td>0.965</td>
<td>4.68</td>
</tr>
</tbody>
</table>
a) Variability Rate in each Environmental Sector

Variability rate is a value to indicate that institutes, issues, tendencies, problems, and/or opportunities change over time in external environment of an organization. Low variability rate shows that the above-mentioned items remain constant from one year to another. Results of findings show that economic (M=3.96), customers (M=3.54), political (M=3.48) and technological (M=3.48) sectors were perceived to have high variability rate, respectively, while competitors (M=3.18), ecological (M=2.43), and socio-cultural (M=2.25) sectors were ranked lower based on variability rate.

b) Complexity Level of each Environmental Sector

There are many factors to be considered in a complex environmental sector. There are many individual and organizational players with complex relations, so that the causative and effective ties are not constant all the time. Results of findings show that economic (M=3.77), political (M=3.68), customers (M=3.58), and technological (M=3.56) sectors were perceived complex by managers, while customers (M=3.41), ecological (M=2.73), and socio-cultural (M=2.43) sectors were ranked lower based on complexity level.

Table 3- Frequency distribution of various external environmental sectors based on variability rate and complexity from managers' viewpoint

<table>
<thead>
<tr>
<th>Factors of External Environment</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>Standard Error of Mean (SEM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variability Rate</td>
<td>48</td>
<td>3.19</td>
<td>0.691</td>
<td>0.099</td>
</tr>
<tr>
<td>Complexity</td>
<td>48</td>
<td>3.31</td>
<td>0.633</td>
<td>0.091</td>
</tr>
</tbody>
</table>

Table 3 indicates that the Mean of variability rate in each environmental sector equals 3.19, and the complexity level for each sector equals 3.31. Accordingly, the highest mean belongs to the complexity of various external sectors while the lowest one is related to variability rate in each environmental sector.

Table 4- One-tailed t-test results for various external environmental sector from the viewpoint of managers in second industrial area of Ahvaz based on variability rate and complexity

<table>
<thead>
<tr>
<th>Theoretical Mean=3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Variability Rate</td>
</tr>
<tr>
<td>Complexity</td>
</tr>
</tbody>
</table>

The t for complexity in each environmental sector (table 4) is (3.42), and degree of freedom equals 47 at p≤0.05 the obtained t is greater than critical t in the table. Therefore, it is concluded that with 95% confidence the events and tendencies in each environmental sector
sector are complexity for organization at an upper-average level from the viewpoint of managers. But for variability rate as significance level obtained is greater than 0.05, it is concluded that the variability rate of various external environmental sectors is not perceived as much as complexity by managers.

Q2: What decision-making roles do the sample company managers; use the information on external environment?

In order to respond to this question Mintzberg's 4 classification were taken into account which include managers' decision-making activities (basses) (decide about improving projects such as providing new services, rebuilding the organization, providing plans for social affairs, automation, and so on), dedicating sources (they decide about dedicating sources such as budgeting, applying sources, setting goals, dividing works and so on), management of unrest (they decide about managing unwanted but important event such as losing customers or supporters, conflict with other organization, cutting financial sources and so on), negotiating (they decide about time of negotiation with organizations or external individuals, organization's condition such as seizure of sources, or agreeing on contracts and so on) (Evans et al., 2009).

In order to have a better understanding of use of information by managers, the sample under study is presented as follows.

With what frequency and interval do you use the information about each system for making decision?

Table 5- Frequency distribution of using information in making decision by managers in sample companies

<table>
<thead>
<tr>
<th>Factor</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making decision</td>
<td>48</td>
<td>3.85</td>
<td>0.699</td>
<td>0.101</td>
</tr>
</tbody>
</table>

Table 5 indicates that the Mean of managers' use of information in decision-making activities of the sample companies equals 3.85, that is, managers most often use sources information about environment in decision-making activities.

Table 6- Use of information about external environment in various decision-making roles by managers in second industrial area of Ahvaz

<table>
<thead>
<tr>
<th>Decision-making Roles</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boss</td>
<td>3.79</td>
<td>0.874</td>
</tr>
<tr>
<td>Deducator of Sources</td>
<td>3.77</td>
<td>0.95</td>
</tr>
<tr>
<td>Management of unrest</td>
<td>3.9</td>
<td>0.973</td>
</tr>
<tr>
<td>Negotiator</td>
<td>3.94</td>
<td>0.932</td>
</tr>
</tbody>
</table>

Findings in table 6 show that managers applied the information about external environment with the same frequency and interval in negotiating, management of unrest, boss and dedicating sources roles with (M=3.94), (M=3.9), (M=3.79) and (M=3.77).
respectively.

Table 7- One-tailed t-test results for testing use of information of sources in decision-making role

<table>
<thead>
<tr>
<th>Variable</th>
<th>t</th>
<th>Degree of freedom (df)</th>
<th>Significance Level (Sig)</th>
<th>Difference of Mean</th>
<th>Confidence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Sources</td>
<td>8.414</td>
<td>47</td>
<td>0.000</td>
<td>0.849</td>
<td>0.646</td>
</tr>
</tbody>
</table>

Results of this test which are presented in table 7 proves that sample Mean for this question equals 3.85. Also it is observed that t obtained (t=8.414) at (∞=0.05) is greater than critical t. Therefore, the calculated Mean difference with theoretical Mean is significant. Accordingly, it is implied that the analysis of table 5 is correct, and that with 95% confidence managers use information about environment in decision-making activities.

Q3: How is managers' perception of the characteristics of various information sources?

Sixteen information sources in 2 various ranges of internal/external sources or personal/impersonal sources were classified and their accessibility, quality and perceived richness of the sources were analyzed the results are illustrated in table 8.

Based on the purpose of explaining the effective characteristics of using information sources by managers of second industrial area of Ahvaz; the effective factors on use of an information source were differentiated in 3 fields of perceived accessibility, perceived quality, and perceived richness. Accordingly, in order to answer to this question 6 items were included in the questionnaire to reflect managers' viewpoint about quality, accessibility and richness of information sources. Like previous classifications 16 sources were identified. These 6 questions were developed for the 16 sources as stated next.

c) Perceived Accessibility of Source

In order to evaluate the perceived accessibility, the following questions are posed:

a) How much time and effort do you need to located and concentrate information in each source?

b) How easy it is to acquire necessary information from each source after encountering or locating them?

And the managers were asked to select one of the following choices to answer question (a): very much, much, to some extent, little, very little. Also to answer question (b) they were asked to select one of these choices: very difficult, difficult, not easy not difficult, easy, and very easy. For estimating perceived accessibility of a source, the responses for these two questions were collected and their Mean was found.

d) Perceived Quality of Information Source
In order to evaluate the perceived quality, two questions were included in the questionnaire:

a) How relevant is the information in each source about the environment?

b) How reliable is the information of each source about the environment?

And managers were asked to select one of these choices to answer question (a): totally irrelevant, partially irrelevant, partially relevant, relevant, and completely relevant, and to answer question (b) they were asked to select one of these choices: totally unreliable, partially unreliable, partially reliable, reliable, and totally reliable.

e) Perceived Richness of Source

In order to evaluate the perceived richness of a source 2 questions were included in the questionnaire:

a) Which source is more up-to-date?

b) Which source is accessible interactively and directly to you?

Then managers were asked to select one of the following choices to answer question (a): very little, little, to some extent, much, very much, and to choose from among the following choices to answer question (b): very little, little, to some extent, much, very much. In order to calculate the perceived richness, the responses for these 2 questions were collected and the Mean was calculated.

Table 8- Mean of perceived accessibility, perceived quality, and perceived richness, the 16 sources based on internal/external sources of an organization

<table>
<thead>
<tr>
<th>Accessiblity of Source</th>
<th>External Information Sources of the Organization</th>
<th>Internal Information Sources of the Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>Customers</td>
<td>Members of Sub-Committees</td>
</tr>
<tr>
<td></td>
<td>competitors</td>
<td>Subordinate Managers or Assistants</td>
</tr>
<tr>
<td></td>
<td>Work Experts</td>
<td>Subordinate Staff</td>
</tr>
<tr>
<td></td>
<td>Governmental Employees</td>
<td>Internal Regulations and Directives</td>
</tr>
<tr>
<td></td>
<td>periodicals</td>
<td>Internal Reports and Research Projects</td>
</tr>
<tr>
<td></td>
<td>Governmental Publications</td>
<td>Library Sources</td>
</tr>
<tr>
<td></td>
<td>Media Stations</td>
<td>Electrical Information Services</td>
</tr>
<tr>
<td></td>
<td>Business Associates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conferences and Visits</td>
<td></td>
</tr>
<tr>
<td>Accessibility of Source</td>
<td>5.89</td>
<td>5.68</td>
</tr>
<tr>
<td>Quality of Source</td>
<td>6.66</td>
<td>6.17</td>
</tr>
<tr>
<td>Richness of</td>
<td>6.69</td>
<td>6.11</td>
</tr>
</tbody>
</table>
Perceived accessibility of a source is calculated by using sum of the Mean attempt to locating the source and the ease of acquiring information from each source. The results show that subordinate staff (M=7.49), subordinate managers or assistants (M=7.23), radio and TV (M=6.64), and business associates (M=6.47) were ranked higher by managers based on accessibility compared to other 16 sources, while governmental employees (M=5.41), competitors (M=5.18) were ranked lower.

The findings of table 8 for perceived quality show that, work experts (M=7.37) were selected as the most qualitative source by respondents based on having relevant and reliable information, while radio and TV (M=5.6) were ranked lower from this point of view.

Perceived richness of a source was calculated using the sum of the Means of up-to-datedness, interaction and directness, where the findings show that the subordinate managers or assistants (M=7.36), subordinate staff (M=7.13), work experts (M=7.07), and electronic information services (M=6.79) were ranked the highest while library sources (M=5.84), governmental employees (M=5.79), and competitors (M=5.65) were ranked the lowest.

Also the results show that based on the classification of the 16 sources to internal/external organization sources, internal organization sources (M=6.46) compared to external organization sources (M=5.68) were more accessible, internal organization sources (M=6.44) compared to external organization sources (M=6.31) were of more quality, and internal organization sources (M=6.51) compared to external organization sources (M=6.19) were richer according to what managers perceived.

Table 9- Mean of perceived accessibility, quality and richness of the 16 personal/impersonal sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Impersonal Information Sources of the Organization</th>
<th>Personal Information Sources of the Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>Business Associates</td>
<td>Governmental Employees</td>
</tr>
<tr>
<td>competitors</td>
<td>Conferences and Visits</td>
<td>Members of Sub-Committees</td>
</tr>
<tr>
<td>Work Experts</td>
<td>periodicals</td>
<td>Subordinate Staff</td>
</tr>
<tr>
<td>Governmental Employees</td>
<td>Governmental Publications</td>
<td>Subordinate Managers or Assistants</td>
</tr>
<tr>
<td>Members of Sub-Committees</td>
<td>Media Stations</td>
<td>Business Associates</td>
</tr>
<tr>
<td>Subordinate Staff</td>
<td>Internal Regulations and Directives</td>
<td>Conferences and Visits</td>
</tr>
<tr>
<td>Subordinate Managers or Assistants</td>
<td>Internal Reports and Research Projects</td>
<td>periodicals</td>
</tr>
<tr>
<td>Work Experts</td>
<td>Library Sources</td>
<td>Governmental Publications</td>
</tr>
<tr>
<td>Governmental Employees</td>
<td>Library Sources</td>
<td>Internal Regulations and Directives</td>
</tr>
<tr>
<td>Members of Sub-Committees</td>
<td>Library Sources</td>
<td>Internal Reports and Research Projects</td>
</tr>
<tr>
<td>Subordinate Staff</td>
<td>Electrical Information Services</td>
<td>Library Sources</td>
</tr>
<tr>
<td>Subordinate Managers or Assistants</td>
<td></td>
<td>Internal Reports and Research Projects</td>
</tr>
<tr>
<td>Work Experts</td>
<td></td>
<td>Library Sources</td>
</tr>
<tr>
<td>Governmental Employees</td>
<td></td>
<td>Electrical Information Services</td>
</tr>
<tr>
<td>Members of Sub-Committees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subordinate Staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subordinate Managers or Assistants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Experts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governmental Employees</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9- Mean of perceived accessibility, quality and richness of the 16 personal/impersonal sources
Results of table 9 indicated that based on classification of the 16 sources to personal/impersonal range, personal sources (M=6.18) compared to impersonal ones (M=6.13) were more accessibility, and personal sources (M=6.78) were of greater quality compared to impersonal sources (M=5.97), and personal sources (M=6.4) were perceived to have greater richness by managers compared to impersonal ones (M=6.11).

Q4: With what frequency do managers use the information of each source about external environmental sectors?

Table 10- Mean and standard deviation of frequency of the use of information in each source about environment for making decision from the view point of managers in second industrial area of Ahvaz.

<table>
<thead>
<tr>
<th>Information Sources</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>3.44</td>
<td>0.92</td>
</tr>
<tr>
<td>Competitors</td>
<td>3.17</td>
<td>0.93</td>
</tr>
<tr>
<td>Work experts</td>
<td>3.69</td>
<td>0.776</td>
</tr>
<tr>
<td>Official Staff</td>
<td>3.29</td>
<td>0.967</td>
</tr>
<tr>
<td>Periodicals and Newspapers</td>
<td>2.89</td>
<td>0.831</td>
</tr>
<tr>
<td>Governmental Publications and Reports</td>
<td>2.94</td>
<td>0.977</td>
</tr>
<tr>
<td>Radio, Television</td>
<td>3.02</td>
<td>0.786</td>
</tr>
<tr>
<td>Trade Associations</td>
<td>3.02</td>
<td>0.945</td>
</tr>
<tr>
<td>Conferences and Visits</td>
<td>2.88</td>
<td>1.002</td>
</tr>
<tr>
<td>Counselors and Members of Subordinate committees</td>
<td>3.27</td>
<td>1.026</td>
</tr>
<tr>
<td>Subordinate Managers or Assistants</td>
<td>3.73</td>
<td>0.791</td>
</tr>
<tr>
<td>Subordinate Staff</td>
<td>3.5</td>
<td>0.989</td>
</tr>
<tr>
<td>Internal Regulations and Directives</td>
<td>2.96</td>
<td>0.874</td>
</tr>
<tr>
<td>Internal Reports and Research Projects</td>
<td>2.81</td>
<td>1.044</td>
</tr>
</tbody>
</table>
As Table 10 illustrates, information on environment from subordinate managers or assistants (M=3.73), work experts (M=3.69), subordinate staff (M=3.5), and customers (M=3.44) was used with more frequency for making decisions by managers, while conferences and visits (M=2.88), reports and internal research reports and proposals (M=2.81), and library sources (M=2.73) were ranked lower from this point of view and were used with less frequency in making decisions.

Table 11- Mean of the Frequency of information Use from Sources for Making Decision by Managers by internal/external and personal/impersonal organizational sources

<table>
<thead>
<tr>
<th>Personal Sources</th>
<th>Impersonal sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers, Competitors, Work experts, Official Staff,</td>
<td>Periodicals and Newspapers, Governmental Publications and Reports, Media Stations, Trade Associations, Conferences and Visits</td>
</tr>
<tr>
<td>Internal Regulations and Directives, Internal Reports and Research Projects, Library Sources, Electrical Information Services</td>
<td>Counselors and Members of Subordinate committees, Subordinate Managers or Assistants, Subordinate Staff</td>
</tr>
<tr>
<td>M=6.9</td>
<td>M=5.84</td>
</tr>
</tbody>
</table>

Table 11 shows that internal information sources (M=6.41) compared to external information sources (M=6.33) are more frequently used in making decisions by managers. On the other hand, personal sources (M=6.9) compared to impersonal sources (M=5.84) were also used with more frequency by managers in making decisions.

$H_1$: There is a direct relationship between perceived accessibility, perceived quality and perceived richness of a source by sample managers and the frequency with which environmental information is used in making decisions.

Table 12- Results of Pearson's Correlation Coefficient on the Relationship between Managers' Perceived Accessibility of Information Sources and the Frequency of the Use of Environmental Information for Making Decision

<table>
<thead>
<tr>
<th>Perceived Accessibility</th>
<th>Pearson's Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of the Use of Source</td>
<td>0.372</td>
</tr>
</tbody>
</table>

According to results presented in the first line of table 12, Pearson's correlation coefficient equals 0.372 with significance level set at 0.009, which indicates that perceived accessibility of managers in the companies in this study from information sources has a direct relationship with the frequency of the use of environmental information of that source in making decision.

According to the second line of table 12, Pearson's correlation coefficient equals 0.478 with significance level set at 0.001, which indicates that the perceived quality by managers in the study from the information source has a direct relationship with the frequency of the use of environmental information from that source in making decision.

Regarding the results presented in line 3 of table 12, Pearson's correlation coefficient equals 0.501 with significance level set at 0.000, which indicates that the perceived richness by managers in the companies studied from an information source has a direct relationship with frequency of the use of environmental information of that source for making decision.

H2: There is a direct relationship between sample managers' perceived environmental uncertainty from an information source and the frequency with which environmental information is used in making decision.

Table 13- Results of Pearson's Correlation Coefficient on the Relationship between Managers' Perceived Uncertainty from an Information Source and the Frequency of the Use of Information from that source for Making Decision

<table>
<thead>
<tr>
<th>Perceived Environmental Uncertainty</th>
<th>Frequency of the Use of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson's Correlation Coefficient</td>
<td>0.290</td>
</tr>
<tr>
<td>Significance level p-value(</td>
<td>0.046</td>
</tr>
</tbody>
</table>
Regarding results of Table 13, Pearson’s correlation coefficient equals 0.290, with a significance level of 0.046 which means that managers’ lack of perceived uncertainty by managers from an information source has a direct relationship with the frequency with which information from that source are used for making decision. Accordingly, the results of the hypothesis fourteen are justified, too.

5) Conclusion
In the present study, perceived customers' sector as an important but uncertain one. Variability rate in economic, political, and technological sectors was more than other ones, respectively. Also, the findings showed that economic, political, customers, and technological sectors were perceived complex by managers, respectively. In general, in the present study the variability and complexity level of economic environmental sector is due to the great important of that sector in the activities of the organizations studied. The previous studies on communication industries (Choo, 1993) technological sector; on private publications (Hosseini, 2010) economic sector; on academic libraries (Farhadpoor, 2011) addressees and customers' sector; on electronic publications (Rasuli, 2013) economic sector were perceived the most uncertain sector.

Results of environmental perception in the present study show that the external environment of the companies in the second industrial area of Ahvaz is a troubled one based on complexity and variability rate whose factors are variable, complex and important, and a managers needs to constantly monitor the environment to be able to predict environmental events and their effect on the organization and the decisions under different conditions. Prediction and correct perception of the environment and event enables managers to show the best reaction in various conditions.

Another considerable issue is the competitors' sector. While the discussion about competition among organization is one of the main concerns of research in the field of organizational management and theory, the low value of environmental competitors' sector from the view point of importance, complexity, and variability rate may indicate that the competition among managers in second industrial area of Ahvaz is not an important concern, and on the other hand, possibly due to economic problems resulting from section against Iran, there is not competition observed in reality out knowing that competition basically takes place when raw material is accessible or the market is developing and new markets are available, the third point to mention is that managers in second industrial area of Ahvaz have sufficient access to market to launch their products to, and that a lot of raw material is available.

Also the findings show that managers are highly interested in being aware of developments in economic environmental sector where information about this sector are more frequently considered by them. Therefore, managers in this study do more scanning in economic environmental sector. In the previous studies on communication (Choo, 1993)
addressees and users (customers); and on academic libraries (Farhadpoor, 2011) addressees and customers' sector was more scanned by managers. It is simply stated that based on importance, variability rate, and complexity perceived by managers of second industrial area of Ahvaz in economic sector, more scanning is carried out in that sector to be aware of the kind and intensity of events in it and to be able to make the best decision against the challenges encountered in this sector compared to other environmental sectors. It is also concluded that managers in second area of Ahvaz use external environmental information in all 4 decision-making roles i.e. negotiation, managing disturbances, boss, and allocator. Findings of previous studies showed that in the field of communication (Choo, 1993); and in the field of academic libraries (Farhadpoor, 2011) managers used external environmental information primarily in the role of a boss. For the role of negotiation, managers are engaged in activities such as negotiation time with organization or external individuals about the condition of the organization such asistrainment of sources, or agreement with contracts and so on, and require external environmental information for performing these duties. In fact, it is concluded that managers in this study need external information more for negotiation where environmental scanning is also done to collect such information.

It was also concluded that the information from the environment about subordinate managers or assistants, work expert, subordinate staff and customers was used with more frequency for making decision by managers, while conferences and visits, reports and internal research proposals, and library sources were ranked lower from this point of view, and were used less frequently in making decision. From another point of view of the four sources whose information was used in making decision, two (subordinate managers or assistants and subordinate staff) were internal organization sources and the two others (work experts and customers) were external organization sources. On the other hand, personal information sources, compared to impersonal sources, were more frequently used in making decision. Previous studies on communication (Choo, 1993), and on academic libraries (Farhadpoor, 2011) showed that internal organization sources compared to external organization sources of information, and personal information sources compared to impersonal information sources were more frequently used in making decision.

Results of testing the first hypothesis showed that there is a significant relationship between perceived accessibility of a source and the frequency with which information from that source is used in making decision. In other words, the more accessible managers in the population of this study perceive a source, the more frequently they use that source for decision-making. The results of previous studies in the field of communication (Choo, 1993), in the field of academic libraries (Farhadpoor, 2011), and in the field of private publications (Hosseini, 2009) indicate a direct and significant relationship between the 2 variables. Accessibility is one of the most important criteria that affect the frequency of the use of information as well as the use of information in making decision. Perceived
accessibility of a source can be associated with the nature of the decision of senior managers. Therefore, creating mechanisms which help managers to access information sources at the fastest possible time and with great ease and on the other hand enable them to easily use the required information from that source can increase managers' chances of the use of the source.

Results of testing the first hypothesis also showed that there is a significant relationship between perceived quality of a source and the frequency of the use of information in making decision from the perspective of managers. Results of previous studies in the field of communication (Choo, 1993), and the field of academic libraries (Farhadpoor, 2011) proved a direct and significant relationship between the 2 variables. Information is vital in the present era and the life of organizations is dependent on it. Information is wide-spread in the environment with great volume, but a characteristic with great impact on the use of information is its quality. Quality of information is the key indicator of the evaluation of decisions and activities. In other words, managers in the population of this study have perceived its importance and get use of information with high frequency which seems valid and relevant to them in order to require information about the environment and use it for making decision. The effective characteristics on use of information sources were discussed in 3 areas of perceived quality, perceived accessibility, and perceived richness of a source. The results showed that work experts, subordinate managers or assistants, subordinate staff, and business associates were ranked high based on quality, while radio and television were ranked the lowest. From another point of view, the findings showed that from manager's perspective, personal information sources, compared to impersonal information sources have greater quality and the same is correct for internal organization sources compared to external organization sources. Also previous studies on communication (Choo, 1993) internal information sources; and on academic libraries (Farhadpoor, 2011) proved that external information sources had greater quality. Therefore, it is concluded that managers in the second industrial area of Ahvaz noticed that personal oral sources were more relevant and reliable than other sources; so that people working in the company are in contact with activities of a company can provide them with more relevant and reliable information about external environment which affects managers' decision-making activities in companies.

The results also indicated that subordinate staff, subordinate managers or assistants, radio and television, and business associates perceived to be more accessible by managers compared to other sources. Of the four sources more frequently used, two (subordinate staff and subordinate managers or assistants) were internal personal organization sources, and two (radio and television and business associates) were external impersonal organization sources. Results of previous studies on communication (Choo, 1993) and academic libraries (Babolhavaeji and Farhadpoor, 2013) showed that library sources, reports and internal studies were perceived more accessible by managers. From another
point of view, managers perceived oral sources more accessible. Also it is worth mentioning that subordinate staff or subordinate managers and assistants were more accessible than other sources for a manager which is due to the short time they require to be located; also their information is easily available. In simple words, they are considered at hand for managers in the population of the present study whose information is easily accessible.

Also it is proved that subordinate managers or assistants, subordinate staff, work experts, and electronic information services had more perceived richness compared to other sources. From another perspective, 3 of the 4 sources (subordinate managers or assistants, subordinate staff, and work experts) were personal and one (electronic information services) was impersonal. Of the 3 personal sources, 2 item (subordinate managers or assistants and subordinate staff) were internal and 1 item (work experts) was an external information source. Generally, from managers’ perspective personal and oral information sources were more up-to-date, interactive, and direct compared to others, which is mainly due to characteristics such as interactivity, ease of communication with them, up-to-datedness of their information, and the possibility of receiving quick feedback from them compared to other sources. Findings of this study are in contrast with those of Peterson et al. (2008) but are in accordance with those of Right (2008).

Also results of testing the first showed that there is a significant relationship between perceived richness of a source and the frequency of its use for making decision by managers. In other words, the richer source for managers, the more frequently it is used by managers in the population for making decision. Results of the present study are in accordance with findings of Pierson et al. (2008). Therefore, it is concluded that whenever a source provides managers with rich information, it makes managers to use that source for collecting information based on their needs and consider it prior to others and increase the frequency of its use. As a result, regarding the high value of personal sources based on richness, it is to the information systems to provide appropriate mechanisms necessary to managing flow of information with personal nature. Results of testing the second hypothesis show that there is a significant relationship between perceived environmental uncertainty and the frequency with which information from a source about the environment is used for making decision by managers in this study. In other words, perceived environmental uncertainty causes managers to use an information sources more frequently. Previous studies on communication (Choo, 1993) indicated a direct and significant relationship between variables; and in the field of academic libraries (Farhadpoor, 2011) no direct relationship was observed between variables. In order to stand against environmental variables, which bring about environmental uncertainty, and to make better decisions managers need information which is partially provided by the very environment. Due to the unstructured nature of senior managers' decisions, and regarding the external organization perspective their long-term approach, environmental
uncertainty creates challenges for managers in making decision and can disturb their decisions. If uncertainty is interpreted as shortage or lack of information, results of present study show that managers in the population of the present study has perceived it well and scan environment to solve this problem and use the sources more frequently to collect and use information for making decision.

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THE OVERRIDING INFLUENCE OF SOCIAL MEDIA AS THE KEY DRIVER OF CINEMATIC MOVIE SALES

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Abstract
This study draws upon literature on social learning to investigate the relationships between feedbacks generated from peers of a social network and product marketing. The study analysed the significantly over – riding effects of social media on demand shift factors in the context of product / service marketing or sales based on a review of literature and meta-synthesis approach. Specifically the work looks at the significant influence and impact of social media on sales and marketing of cinematic movies as having an overriding effect on the influence of the competing economic theory of shift factors of demand on product / service sales. Social media in this context focuses on feedbacks generated from on line technologically facilitated networks such as face book, twitter etc.

Keywords: Social network, Social media, Demand shift factors, Experience goods.

1. INTRODUCTION
The choices consumers make in the cultural and creative industries are not just a function of the factors that affect a change in demand (shift factors) as stated in economics, but also a function of the choices that others make (Jason, Stuart John & Paul 2008). Thus consumption trends are greatly determined by the choices that others make in a social network. The government of most nations as a panacea for sustainable development has identified the vital role of the creative and cultural industries. Thus the choice of cinematic movie made owes largely to the fact that it is a product that cuts across most nations in the context of their creative and cultural industries (Geoffrey (ed.) 1996). Cinematic movies therefore represent one of the most highly demanded experience goods in most nations of the world. A critical review and analysis is therefore carried out in consistency with the proposed research model.

Prior research and various literatures have examined the influence of social media on product sales and marketability. Various literatures and academic work also assert the effect of demand shift factors as a key
determinant of product sales and marketing. It is important to note that both theories are usually examined in isolation and independently, without cognisance to theoretical conflicts in the context of their influence on product sales and marketing. Thus the existing literatures and academic papers on both theories provide a strong basis for a comprehensive review and critical analysis of literature in the context of this study.

The world has become a global village particularly facilitated by social media. Social media, which began as tools of entertainment for young people, are today used by people of all ages for business purposes. This trend poses both as a threat as well as an opportunity for companies and organisations (MCE 2010). Consequently social learning from social media plays a very important role in influencing purchasing decisions as regards movie sales and marketing. Movies as an experience good attract a lot of comments, reviews and opinions from consumers. The context of movies therefore provides a good platform to conduct a study of social media versus demand shift factors in the context of product sales and marketing.

2. RESEARCH OBJECTIVE
This paper beyond examining the significant effect of social media on the sales and marketability of cinematic movies, also seeks to analyse the over – riding effects of social media over the traditional economic concept of shift factors of demand. Thus this paper is aimed at creating a broader knowledge on the enormously significant influence of social media on the movie industry. Firstly the study conceptualises social learning based on movie reviews from social media. Secondly the study also provides conceptual arguments as regards the significantly over riding influence and effects of social media on basic economics theory of demand shift factors in the context of movie sales and marketing.

3. RESEARCH QUESTION
The study examines one key research question: In what ways does social learning from social media sites indicate an over ride effect or influence over demand shift factors in the context of cinematic movie sales and marketing?

4. STATEMENT OF PROBLEM
Larry (2005), describes the theory of demand, as a model of consumer behaviour, he further explains that the theory of demand attempts to identify the factors that influence the choices that consumers make. This suggests that traditionally, consumer behaviour as regards consumption trends are generally analysed from the view perspective of demand theory. The economic theory of shift factors of demand suggests that individual consumers make independent decisions as regards what to consume based on certain factors regarded as non – price determinants. This results in either a positive or negative change in consumption trends (Paul and William 1985). The theory states that at the same prevailing market prices consumers will demand more or less than previously demanded as a result of these non – price determinants.

A publication of Management Centre Europe (2010) on business trends overview, describe the world as a
reflection of a village because of the influences of social networking tools like face book, my space, twitter, and all kinds of blogs. Individuals give feedbacks about their experiences about a business that companies cannot control, yet these feedbacks have great impacts on future sales of company products (MCE 2010). Companies are therefore left with no option than to embrace this phenomenon, in an attempt to make it work for them (MCE 2010).

Dei world-wide (2008) argues that sixty percent of consumers are reported to agree that the recommendations from other individuals on line are valuable, credible and could influence their perceptions of a brand, and hence influence their purchasing decisions. In other words a high degree of authenticity is associated with social learning from social media. Particularly in the context of the movie industry, Morreti (2010) describes social learning as an important determinant of movie sales. He further argues that ‘social learning makes successful movies more successful and unsuccessful movies more unsuccessful’. This is consistent with the assumption that consumers update their perception of the quality of a movie based on the purchasing decision of their peers (Morreti 2010). Consequently the role of social media as an effective tool of influencing consumption trends and sales of movies cannot be over emphasised and hardly a subject of debate.

Rajshree and Barry (2002) argue that demand shifts due to non – price factors is the major determinant of increased sales described as ‘sales take off’ particularly in the context of a new market. Thus supporting the traditional demand theory of shift factors as the key driver of product sales and marketing. Larry (2005) argues that traditional media advertising can be used to brand a product or increase the demand for the product. This implies that advertising which is a shift factor of the traditional demand theory is considered a key determinant for increased sales of products.

Even though extensive research has been carried out on the significant effect of social media on product sales, a closer look at the effects of demand shift factors suggests a conflicting theory. For example should the operators of cinemas and theatres, expect high sales during summer based on climatic conditions? Or should they study on line reviews about a movie as a platform for sales prediction. There is therefore a need to compare both theories with an underlying objective of improved movie sales and marketing. Thus critical reviews of both theories indicate a degree of conflict and competitiveness particularly in the context of consumer behaviour as regards consumption trends and purchasing decisions.

5. GAP IN LITERATURE

Previous studies often investigate the social media theory as a complement of the theory of demand shift factors. The enormous complexity of the overriding influence of social media theory on the theory of demand shift factors is hardly recognised. This study proposes that more attention be given to social learning and feedbacks of movie reviews from technologically facilitated networks referred to as social media in the marketing of movies.

6. CONTRIBUTION TO KNOWLEDGE

Thus this study contributes to the literature by taking into account the impact of social media as a
significant determinant of movie marketing, and as a primary reference for movie sales.

7. RESEARCH METHOD
This study is carried out based on a comparison between the theories of social media and demand shift factors in the context of cinematic movie sales and marketing. The aim of this study is to establish the overriding influence exerted by the social media theory over the theory of the demand shift factors particularly in the context of movie sales and marketing. An objective, thorough summary and critical analysis of the relevant available research and non research literature on the topic being studied is carried out to collate data consistent with the aim and objective of this study.

8. DATA ANALYSIS
In order to accurately determine the effects and influences of the theories of demand shift factors and social media on movie sales and marketing, a contextual application of both theories is carried out on cinematic movie sales and marketing. A meta-synthesis approach is used to critically analyse the effects and influences of both theories as reviewed in literature to determine which theory exerts an override on the other as regards movie sales and marketing. In other words a critical analysis and synthesis of findings presents a probable reflection as regards which theory exerts a comparatively greater influence particularly in the context of movie sales and marketing.

9. LITERATURE REVIEW:
9.1. Conceptual framework
9.1.1 Social network
Various literature and scholarly papers on the concept of social networks reveal the unending interest on the subject. “A social network can be defined as connectivity between individual agents where the actions of other agents within the network informs production and consumption trends” (Jason et al 2008). It can therefore be deduced that human beings have the ability to connect with one another, generate and interpret information from each other. These networks are usually defined connections, which could also be technologically facilitated (face book, twitter, etc). A social network therefore is not just a group of people one is familiar with for example friends, families and colleagues, but as described by Granovetter, (1973) social networks also consist of the concept of information networks.

9.1.2 Social media
Social media has become pivotal in the general study of social networks. Mayfield (2008) describes social media as a new set of online media sharing characteristics of participation, openness, conversation, community and connectedness. Consumers can easily post their views and comments through various routes (e.g. face book blogs etc.), and also read the comments of friends, family, anonymous peers or experts, or share opinions and views about products or services with other potential consumers. Owing to this technologically aided mass dissemination of information with its aptness and speed, it has become apparent that the comments and views of other individuals posted through various routes have the ability
to influence the choices that individuals make as regards consumption trends, and purchasing decisions

9.1.3 Experience goods
Products are classified into three categories namely; Search, experience and credence products. Search products are those consumers can obtain complete information before purchase, experience products are those consumers can only obtain information during or after purchase of the product, while credence products are those consumers cannot obtain information before or even after purchase (Marcus, 2008). Generally, consumers purchasing experience goods place more value on descriptions and evaluations of prior experiences of others who have consumed the goods. Such information reduces the uncertainty of the quality of goods in focus and facilitates effective decision-making (Marcus, 2008). It can therefore be deduced that online reviews and comments posted about goods or products classified as experience goods are given greater priority than those of search, or credence goods. Hence this study focuses on the examination of the influence of social media on the sales and marketing of cinematic movies.

10. THEORETICAL FRAMEWORK
10.1 Word of Mouth
Tourism researchers have established that recommendations and suggestions from acquaintances and family are the most commonly obtained and significant source of information used by customers or clients in their travel decision making (Crotts 1999; Perdue 1993). The information communicated by acquaintances and family is construed to be more convincing, straightforward, and dependable than those generated from marketers, given that the communicators are not rewarded for the recommendations. Development in the Internet and Web 2.0 technology and know-how currently permit clients to gain access to personally meaningful appraisals not only from acquaintances and family but also from unfamiliar persons. Thus Word of Mouth through the social media influences the decisions of buyers and consumers particularly in the context of an experience product such as cinematic movies.

10.2 Psychological Ownership Theory and Perceived Control
Asatryan and Oh (2008) employed Psychological Ownership Theory in elucidating why previous guests are actuated to recommend WOM feedbacks. From one perspective, some clients build up a stance of relations with firms they are dedicated to that translates into a sense of ownership, as substantiated by the use of languages such as ‘mine’, ‘my’, and ‘our’ in their reviews. In such situations, one would presuppose that loyal customers would offer optimistic and affirmative feedback to others, directing their unenthusiastic feedback to management (Mattila 2001). On the other hand, in the absence of such loyalty, the intention to write either an unconstructive or optimistic review may well be a craving to be in charge of or control the business obliquely by communicating with its prospective probable customers.

Therefore loyal customers’ motives in posting affirmative reviews on social media are efforts to compensate firms; such as cinematic movie operators. The motives of non-loyal clients are based on the
fulfillment achieved in being useful to other customers. As argued by Pierce, Kostova, and Dirks (2003), the longing by the consumer to be in charge through such communications possibly will result in feelings of worth and value as well as inherent pleasure, and extrinsic contentment in providing such recommendations to others.

10.3 Theory of consumer behaviour

The theory of consumer behaviour as developed and propagated by Alfred Marshall is based on the assumption that an individual consumer is a rational buyer who has access to perfect information and knowledge about the market (Schiffman and Kanuk, 2000). The theory also suggests that the individual consumer is fully aware and conversant with his or her desires and needs hence possess the ability to determine the most appropriate approach to satisfying them (Hirschman, 1985; Hamansu, 2008). Specifically, the theory suggests that the demand for an individual consumer is based on four primary factors. Firstly a consumer buys based on the price of the product given that all other factors remain unchanged. Therefore, in principle the higher the price the less of a product a consumer demands and vice versa. Secondly a consumer’s income also largely determines how much of a product is demanded. This suggests that the greater an individual’s income the greater the capacity to demand. Thirdly it is also assumed that the prices of closely related products are also salient factors in determining the demand of a consumer for a product. Fourthly, consumer tastes and preferences also determine to a large extent the demand of an individual. Larry (2005) and Paul and William (1985) in support of the role of demand shift factors also state that effectiveness of advertisement and size of population are important factors that determine the demand of consumers given that all other factors are under control.

11. SOCIAL MEDIA VERSUS DEMAND SHIFT FACTORS

11.1 AVERAGE INCOME OF CONSUMERS VERSUS SOCIAL LEARNING

Based on the theory of demand, nations or communities with wealthy families generally demand more of all goods and services, than nations or communities with averagely poor families (Paul and William 1985; Colander, 2008). From this view perspective it is assumed that, communities with wealthy families will demand more movies than the communities with poor families, at the prevailing market prices of various movies. Thus it is assumed that more people will go to the theatres and cinemas to watch movies in communities where the families are averagely wealthy, and on the other hand less people will go to the theatres or cinemas to watch movies in communities where the families are averagely poor. The implication is that it is assumed that movie sales will be higher in communities with wealthy families than the communities with averagely poor families.

However, a news release by MCW (2011) of Britain’s mass affluent consumers’ lifestyle summarised a research conducted by Master Card in partnership with Future Laboratory. This News release argues that with affordability rarely in question, a major percentage of those surveyed indicate that purchasing decisions are made only after thorough examinations of options and price ranges, making use of the internet for personal recommendations, and price comparison sites. Furthermore, ACCC (2010) a guideline research for consumer product safety recall summarise different demographic groups and their
preferred communication methods. A careful study of the summary indicates that consumers with higher incomes have shown a significantly increased use of on line communication, suggesting the major determinant and influence of their business and social activities.

These findings particularly in the context of cinematic movie sales and marketing suggest that communities or individuals with higher incomes, who are expected to demand higher quantities of goods, also make most of their purchasing decisions based on social learning and feedbacks from social media. Thus there is an indication that social learning about a movie from social media would exert greater influence on the purchasing decisions of individuals than average income.

Hypothesis 1: Reviews and comments posted about a movie on social media exert greater influence on purchasing decisions than average income of consumers

11.2. SIZE OF MARKET/ POPULATION VERSUS SOCIAL LEARNING

The size of a market or the population in a place largely affects the demand trend for goods and services (Paul and William 1985). In principle therefore, based on the assumption that all things remain constant, the total quantity of goods demanded increases in the same ratio as an increase in the size of the market or the population of a place. Consequently the assumption is that a highly populated community will reflect a very higher demand for movies compared with areas or communities with lower population. From the perspective of the demand shift factor theory, it is expected that more individuals will go to theatres and cinemas to watch movies in highly populated communities, and fewer individuals will do the same in densely populated areas.

Quite conversely, with the concept of globalisation and de – localisation in focus, Smith and Doyle (2002) argue that most interactive activities and engagements that were characterised by face – to – face involvements or localization are now carried out across great distances. They further argued that activities, interactions and relationships have been uprooted from local origins and cultures. Consequently the simple notions of distance and territory are being redefined. The ‘spaces’ we occupy when we carry out economic and social activities using the Internet creates a different definition of place and the community we belong (Smith and Doyle 2002).

It is important to note that activities in local neighbourhoods are increasingly being influenced by the actions of people and systems operational in distant places; as such people and system are increasingly interdependent (Smith and Doyle 2002). Thus the world seemingly consist of separate and sovereign individuals, firms, nations or cities, but a more complex reality is that the world actually is made up of multiple connections (Smith and Doyle 2002). Businesses therefore as described by Smith and Doyle (2002) are organised around networks of production, management and distribution. Thus sophisticated information systems are regarded as essential ingredients in the context of the concept of globalisation.

Therefore it could imply particularly in the context of cinematic movie sales that the size of the market or
population of individuals in a city does not necessarily culminate into higher marketability or increased sales. There may be an indication that the size of market does not necessarily imply increased sales, which in this context is may be primarily a function of social learning from social media.

Hypothesis 2: Reviews and comments posted about a movie on social media exert greater influence on purchasing decisions than size of market/population

11.3 PRICE AND AVAILABILITY OF CLOSE SUBSTITUTES VERSUS SOCIAL LEARNING
The price and availability of a good substitute to a product is also assumed to largely affect the consumption trend of consumers (Paul and William 1985). From this viewpoint, if the cost of watching a new movie at a cinema is far more expensive than the cost of watching a substitute movie at another cinema, then less individuals will demand the new movie, and vice versa. In other words it is assumed that the degree of sales a new movie makes at cinemas or theatres depends largely on the availability and price of good substitute movies. It also implies that even if a new movie promises to be a blockbuster, sales and marketability of the movie depends largely on the availability and price of a substitute movie.

On the other hand Bo and Lillian (2008) argue that ‘what other people think’ has always been a determinant for decision making for most people long before the awareness of World Wide Web. It is worthy to note therefore that the internet among many other things has made it possible to have access to opinions and experiences of a vast pool of individuals who may neither be personal acquaintances nor experts, but are always ready to give their opinions to strangers via the internet (Bo and Lillian 2008). A summary of two surveys of more than 2000 American adults conducted on opinion mining, reports that consumers are willing to pay from 20% to 99% more for a 5 star rated item than a 4 star rated item (Bo and Lillian 2008). These ratings symbolise the opinions, reviews, and perceptions of other individuals about a product from social media.

Thus these findings provide evidence that other people’s perception of the quality of a product regardless of the availability and price of close substitutes largely informs the purchasing decisions of individuals. **Hypothesis 3:** Reviews and comments posted about a movie on social media exert greater influence on purchasing decisions than price and availability of close substitutes.

11.4 INDIVIDUAL TASTE (S) AND PREFERENCE (S) VERSUS SOCIAL LEARNING
It is assumed that the demand trends of individuals are largely determined by subjective factors like individual tastes and preferences for goods and services (Paul and William 1985). Consequently, a new movie may promise to be entertaining and be of high quality, but individuals still may not demand such movies if the movies are not consistent with their tastes and preferences. It is therefore assumed that movies are not marketable just for their high quality, or presence and performance of certain actors, but particularly because they align with individual taste and preferences. Here the individual taste or
preference is regarded as a principal factor in the explanation of demand trends in the context of movie sales

Jeong, Anjana, and Yong (2008) in a research on the ‘you tube’ model, argue that the uncertainty in user interest prediction is suggestive of potential effects for social interaction as largely reflective of individual preferences and actions being dependent on the decisions of others. The authors further argue that identifying social influence is complicated owing to an indication that individual choices are reflective of the choices of a social group to which they belong. Sheila, Joseph and Tadhg (2011) argue that the evolution of the web and the increased use of social media influence purchasing decisions and affect the consumption of cultural goods in a significant way. Sheila, Joseph and Tadhg (2011) further argue that the consumption of cultural goods rely on word of mouth, taste cultures and popularity, in such a way that there is clear indication that individual choices are dominated by information feedback from social networks, as against innate preferences and price signals.

The findings of this study reflects an indication that most consumption decisions are primarily done based on feedbacks, reviews and opinions from social media. Individual tastes and preferences have become subjective to wider online social and cultural matrix. In the context of cinematic movies, most individuals may only be favourably disposed to watching movies that are highly rated in opinion and review sites from social media and would also be unfavourably disposed to watching movies with negative reviews and opinions. Social media in this context thus exerts an override on innate preferences as regards purchasing decisions hence a comparatively major determinant of cinematic movie sales and marketing. **Hypothesis 4:** Reviews and comments posted about a movie on social media exert greater influence on purchasing decisions than individual tastes and preferences.

11.5 MASS MEDIA VS SOCIAL LEARNING

It is assumed that effective advertisement of a good or service increases the awareness of a larger part of a market thus facilitating sales (Larry 2005). It therefore implies that a movie well advertised is expected to be very marketable, and reflect a high degree of sales. On the other hand, a movie not effectively advertised should reflect very low sales and marketability. In other words, more individuals will go to theatres and cinemas to watch movies effectively advertised and vice versa. It is important to note that advertisement in this context includes traditional media like the television, radio, print media, and etcetera.

David (2009) argues that the influence of traditional mass media institutions is strongly challenged by what he refers to as audience participation and co – creation in online media production. He further argues that internet based social media tools such as blogs and other social network sites have given voice to the opinions and perception of millions of consumers’ worldwide virtually breaking down the dividing walls between the consumer and producer or the public and audience. With information about the quality
of a product in focus, Linville (2009) argue that traditional media like the television and print media are ranked at the lowest bottom by consumers owing to the fact that social media is considered a quick and more reliable source of information as regards the quality of a film. Even though the conventional mass media like the television, radio and other print media still occupy a pivot place as regards the dissemination of mainstream information, it is increasingly evident that they are deeply influenced by the online conversations taking place on social media (David, 2009; Enrico, 2010). Therefore social media on product sales may exert greater influence than the effects of the traditional mass media. Particularly in the context of cinematic movie sales as an experience good, the influence of social media may reflect an override on the effects of traditional mass media thus giving credence to the possible comparatively greater influence of social media over mass media, particularly in the context of cinematic movie sales.

Hypothesis 5: Reviews and comments posted about a movie on social media exert greater influence on purchase decisions than advertisement through mass media.

12. DISCUSSION AND IMPLICATIONS

Based on accumulated knowledge from these findings this study proposes that social media may exert an override effect on demand shift factors as regards purchasing decisions of individuals particularly in the context of cinematic movies. This paper has examined the possible overriding effects of social media on demand shift factors, in the context of movie marketing. The paper has identified social media as the probable predominant determinant of increased sales particularly in the context of cinematic movie sales. It has observed that though more movie producers and marketers are beginning to appreciate the crucial role social media plays in movie marketing, more priority and focus needs to be given to social learning from social media as a basis for effective movie marketing.

The paper argues that a decline in movie sales especially cinematic movies may owe largely to the assumption by stakeholders in the movie industry that non – price determinants of demand exert greater influence on purchasing decisions of individuals (Rotfeld 2006). Analysing the influence of social learning from social media as a complement of traditional demand theory of shift factors as regards sales and marketing of movies will greatly undermine the predominant effects of the social media theory. Findings from literature reviewed in this study has shown that favourable social learning from social media does not only significantly affect attitudes and beliefs as regards purchasing decisions of individuals, but as well as propel the buying intentions of consumers. This is particularly consequent upon the influence of peer group from social media. Individual consumers are greatly influenced by peer pressure from social media and usually tend to adopt the behavioural trends of their particular peer group in the context of purchasing decisions. The individual consumer usually makes the commitment to adopt peer group purchasing trends to remain in conformity with what is seen as fashionable amongst peer groups from social media. Traditional marketing gives credence to the influence of relationships as regards purchasing decisions, but
the findings from literature has shown that social media exerts greater influence particularly in the context of purchasing intentions and decisions of individuals. This influence is enhanced by the opinions, reviews and perception of consumers from social media about a product. These opinions, reviews and perceptions are usually seen as credible as such individual consumers are greatly influenced by them. Dave (2011) argues that social media occupies a pivotal place as regards current trends of consumer-to-consumer conversation, and prospective gains of interpersonal marketing. Thus a strong indication that social media is interlocked with movie marketing particularly because movies are experience products. It is therefore no exaggeration that an effective social media campaign can effectively facilitate movie sales in an exceptional way. Dave (2011) further argues that social media is predominantly based on the word of mouth, giving credence to the content of product marketed. Hence in the context of cinematic movies, social media has the ability to boost sales and positively influence purchasing decisions.

Marketing is only effective where a large number of people pay attention. The concepts of globalisation and cyber space have generated large consumer traffic on social media. Hence social media has become the most effective forum and platform for successful marketing of products and services. In the context of cinematic movies, engaging the audience on social media sites can effectively facilitate movie marketing by creating an awareness, which largely increases fan base. This approach gives the audience a sense of belonging and stirs up interest in the movies marketed. That social media marketing has, outpaced traditional ways of movie marketing like television and print media cannot be over emphasized (Rotfeld 2006). Social media remains the only platform where a two – way communication is created between the consumers and the movie marketers, consequently increased sales is achieved by the multiplier effect of social learning from social media.

13. CONCLUSION

Generally, the recent dominance of online social and business activities cannot be over emphasised. Today more than sixty - seven percent of the world’s population are involved with social media (Santore 2011). Consequently these interactive websites and messaging services have become individual outlets to the world. Apart from being interactive and re - creational, these sites also serve as information banks for individuals. Thus social media is a presumed to be a major overriding determinant of purchasing decisions particularly in the context of cinematic movies. As such it is advocated that studios and production houses should give greater priority to social media as regards their marketing budget. With these recent global trends, movie producers and marketers need to re-strategize to ensure that good quality movies are within the reach of all and sundry. The movie industry turn out a large number of films yearly, therefore survival and success in this industry will possibly require an appropriate social media strategy consistent with the achievement of this goal and objective.

This research dots the possible role of customer feedback and social media as regards cinematic movie firms’ strategic benefit. Firstly cinematic movie firms should underline and bring to the fore the
awareness of psychological ownership and control among their customer base through loyalty and customer feedback (Pan and Crotts 2010). This is consequent upon the fact that cinematic movie firm should anticipate customers to both recompense and penalize their performance through social media (Pan and Crotts 2010).

14. INDICATIONS FOR FURTHER RESEARCH
This study proposed five hypotheses based on an extended review of literature. Thus the obvious next line of action will be to carry out an empirical research geared at testing the hypotheses presented.

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FACTORS THAT INFLUENCE IMPLEMENTATION OF QUALITY MANAGEMENT SYSTEM IN BANGLADESHI GARMENTS INDUSTRY

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Abstract:
Garments industry has made crucial contribution to this aforesaid revolution of the Bangladesh national economy as well as uphold world’s second biggest exporter of clothing after china. But in this competitive world to sustain this leading sector have to maintain some modern system which is recognized by all renowned buyers as well as stakeholders. Quality Management System would be elucidation to get rid of this issue. Bangladeshi garments industry follow QMS but not organized way. In this paper, those factors may influence implementation of quality management system in Bangladeshi garments industry, challenges to implement, current practices will be discussed. Sample size was 6. Those holding functional manager of renowned garments as well as deal in renowned buyers are considered only. To assess the QMS practices in garments factory of Bangladesh is gigantic task. From the research, It is seemed that there is no garments industry which is using QMS properly somewhat they are using some of them. It is also predictable that in future if Quality Management System is maintained in proper way, Bangladeshi garments industry will lead in this thriving sector.

Keywords:
Bangladeshi Garments Industry, Quality Management System, 4 point System, 5’S, DWM, Six Sigma, CQI, BGMEA.

1. INTRODUCTION:
Garments industry is considered as the backbone of the Bangladeshi economy. Garments industries have been really significant element of Bangladesh's economy from last few decades. Bangladesh is the world's second biggest exporter of clothing after China. The ready-made garments (RMG) sector has a larger prospective than any other sector in terms of providing employment to a great share percent of the work source in the country and foreign exchange earnings to reduce poverty and make a contribution to the national economy. According to the ministry of Industry, Bangladesh; currently, the textile industry reports for 45% of all manufacturing employment. More than 78% of Bangladesh’s export earnings come from the garment industry which is 15 percent share of GDP.
Actually in Bangladesh, ready-made garments (RMG) sector which was export oriented made their journey in late 1970s like a small nontraditional sector. In 1978 Reaz Garments exported its first delivery to USA at that time Bangladesh exported ready-made garments only US$ 69 thousand. After that within a period of about two decades exports has raised up to US$4.5 billion by FY2002. The garments industry sector registered an exceptional growth rate of 15 percent per year over the earlier decade alone which is remarkable. Indeed this was an especially very high growth rate for expanding industry anywhere in the world. This high growths rate of industries helped to boost garments industries, in 1983 the number of garments industries were only 50 but in 2002 within few decades the number was 3400, with the number of garments workers reaching approximately 1.5 million of whom almost 80% were female (Bhattacharya, Rahman Mustafizur & Raihan Ananya: 2002). According to Ministry of Industry in Bangladesh currently there are more than five thousands garments industries with almost 4 million workers. Initially the market for this product was limited to a few west European countries, which have been subsequently expanded to the U.S.A. Canada, Scandinavian, Nordic, and Middle East countries (Management system of Bangladeshi Garments Industry, 2013). It is a fact that increasing production and export earnings of Ready Made Garments hold the key to save the country from the present economic depression. The sector has now obtained a significant place in our national economy.

However, after the World Trade Organization (WTO) regime this garments industry sector is facing severe competition in the international market. These industries are not at the same stage in evaluation to their competitors in the scope of competitiveness like timely delivery, reliability, durability, consistency, quality and innovation. The promoter of quality management system approach like Crosby, deming and juran considered that implementation of quality management idea helps the industries to carry out the best levels of quality and performance. Bangladeshi Garment industry gets the optimistic reputation throughout the world. To keep on this image, quality assurance of garments products is one of the fundamental factors to sustain in this competitive business field. In developed countries like UK, USA and Japan, Total Quality Management has been the topical issue for many years in all business sectors particularly in manufacturing industry (Chowdhury 2010). Actually Bangladesh traditionally drops back in industrialization (Sharker et al., 2006). After liberation, the Government of Bangladesh has been endeavoring to improve its industrial growth (Karim, 2009).

2. METHODOLOGY:
This study conducted by qualitative research method. Because Qualitative research is especially effective in obtaining culturally specific information about the values, opinions, behaviors, and social contexts of particular populations (Qualitative Research Methods: A Data Collector’s Field Guide, n.d.). In case of this study qualitative methods is more significant because of its ability to provide complex textual descriptions of how people experience a given research issue. This paper relies on interviews through telephone and Skype. The target respondents were the head of the industry and selected functional managers such as production manager, quality control manager of the selected garments industry. The author of this paper used semi structured interview. Semi-structured interviewing, according to Bernard (1988), is best used when you won't get more than one chance to interview someone. Time spent in each interview is approximately forty five minutes to one hour. The researcher not only jotted down data in his notebook, but also recorded every word of the interviews on latest voice recorder software. Interviews were held during the second week of August to first week of September, 2014 and mostly in the morning and after 10 pm in the night.
The interviews were conducted in Bengal. To make transcribe Bengal to English, researcher used “Dragon Naturally Speaking 12.0” software and edited some errors. All interviews were transcribed. The main data analysis parts were conducted by content analysis Interview transcripts were thoroughly read several times to understand the flow of talk; memorizing took place during that time to identify the meaningful parts of the interviews and observation. After the preliminary analysis, transcripts were examined once again to find the codes. Initially 70 codes were identified from all six interviews. As the first one was open coding, codes were rechecked to find similar codes. Through re-examination of codes, 18 codes were removed for same meaning. After finalizing coding, several codes were moved into categories for the similarity of contexts. All 52 codes were categorized into 13 categories which explained the major factors of this research. But while checking the evidence in favor of these categories in the interviews, it revealed that some of the categories had similar interpretation but different expression by different individuals. So, finally author came up with ten unique categories which could be better explained under four themes.

### 3. RESULT AND DISCUSSION:

#### 3.1. These Quality Management Systems will be surplus for Bangladeshi Garments Industry:

This study has 06 participants where all the factories follow the 4 point system for inspecting the fabrics quality of garments. All of them are informed their buyers as well as employees are satisfied with this system. They are also agreed this system can be surplus for successful garments industry in Bangladesh. Only 4 factories out of 6 factories are used 5’s which is another quality management system. But all of the participants agreed that it is one of the best processes to satisfy employees.

From the participants, none of them follow Six Sigma. But they agreed it is the best way to manufacture products from free of defects. From the research, the researcher became to know that the reason of not following Six Sigma is mainly lack of knowledge as well as lack of expertise of this system. Two participants out of six informed they are planning to start within 2016. In this case they asked for Govt. help.

All of the participant’s factory follows Daily Work Management (DWM) and they informed by following this they can achieve the aims of each and every department. Only one participant’s factory follows Continuous Quality Improvement (CQI) out of six factories. Three of them agreed that PDCA (Plan, Do, Check, Act) model of CQI can be effective for Garments industry. They are planning to implement it.

#### 3.2. Current Practices in Bangladeshi Garments Industry:

<table>
<thead>
<tr>
<th>Position of Participants</th>
<th>Quality Management System (QMS)</th>
<th>5’s</th>
<th>Six Sigma</th>
<th>4 point</th>
<th>Daily Work Management (DWM)</th>
<th>Continuous Quality Improvement (CQI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Manager</td>
<td>Yes</td>
<td>Not done</td>
<td>Yes</td>
<td>Yes</td>
<td>Not done</td>
<td></td>
</tr>
<tr>
<td>Quality Manager</td>
<td>Not done</td>
<td>Not done</td>
<td>Yes</td>
<td>Yes</td>
<td>Not done</td>
<td></td>
</tr>
<tr>
<td>Assistant Quality Manager</td>
<td>Yes</td>
<td>Not done</td>
<td>Yes</td>
<td>Yes</td>
<td>Not done</td>
<td></td>
</tr>
<tr>
<td>General Manager</td>
<td>Yes</td>
<td>Not done</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 1: Current Quality Management System practices in different garments industry.

<table>
<thead>
<tr>
<th>Quality Manager</th>
<th>Not done</th>
<th>Not done</th>
<th>Yes</th>
<th>Yes</th>
<th>Not done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Quality Controller</td>
<td>Yes</td>
<td>Not done</td>
<td>Yes</td>
<td>Yes</td>
<td>Not done</td>
</tr>
</tbody>
</table>

In this study the researcher has taken 6 different persons interview whose are holding functional level position in different garments factory. Most of garments industry in Bangladesh doesn’t follow quality management system. Some of them are following but not organized way. From collected data the following things are found –

All of the participant’s garments industry follows 4 point system in order to inspect the quality of fabrics. They also follow cutting quality by inspecting by manually audit. Along with them 3 factories follow 7 Pcs inspection indiscriminately in sewing quality control. All of them maintain one quality maintenance book in every section to inspect quality daily basis.

All of them 6 out of 6 factories maintain to test different things such as color fastness test, shrinkage test, azo free test, GSM test etc. Four garments factories out of six follow 5’S to control human management as well as satisfying employees. On the other hand rest of two garments follows generally as usual management system to maintain people management. From data findings the researcher got all of the six garments don’t follow Six Sigma which is one of best method to produce defect free product. Another quality management system; Daily Work Management (DWM) is maintained by all of the participants garments industry.

3.3. Challenges to implement Quality Management System in BD garments industry:

3.3.1. Financial crisis: To implement quality management, system financial factors always come first. Because to implement QMS properly always it needs to change the factories layout. All of the participants agreed that if they want to implement Quality Management System in their industry, it will need huge investment. Some of them said they don’t have that much opportunity to take loan with low interest. In this case government can help to figure it out. One of them said buyers also can help us to implement QMS. By implementing it they can also get benefit from it.

3.3.2. Lack of Education: When garments industry started its journey, from that time this sector faces different kinds of problem only because of lack of proper education on this sector. All participants are agreed about it. They informed that they can’t implement quality management system properly because they don’t have enough educated man power. They also said most of them are recruited based on experience not education. So those people are used to with old system. They are also very afraid to implement new system in their workplace. One of the respondent said some existing employees are really frightened about this. They think they may lose their job. They are thinking like this because they don’t have enough knowledge about quality management system.

On the other hand another respondent said employees can be convinced if we can train them. He gave an example in his garments at first when they wanted to implement QMS, some employees called strike against it. But quality
manager called them and asked about their problem. They told they are very afraid about to lose their job because they don’t know anything about it. After that the manager arranged a workshop and few basic training. Now almost 8 years they have implemented it and employees are very happy with this system. So all of the respondents agreed that if Govt. and BGMEA can arrange some workshop or training about quality management system in every garment or they can recruit one or two expertise in every garment, after that those people can train other existing employees. By doing this it’s possible to implement every garments industry.

3.3.3. **Lack of Awareness:** All the respondents are agreed that lack of awareness is one of the constraints of implementation of Quality Management System. Most of the garments employees don’t have enough knowledge about it. Also they don’t want to know about it. One of the participant said many garments industry can’t implement QMS because they can’t make influence within existing employees. If all of the employees know about benefit to implement QMS then they will come forward by their own. So in here according to some respondents from govt. as well as BGMEA can take some step to make awareness about quality management system.

3.3.4. **Infrastructure:** In Bangladesh infrastructure is a big challenge for not only implement QMS but also build up a new industry. According to one participant who is general manager of a garments industry, informed most of the garments industry is side of Dhaka city which is capital of Bangladesh. So in here the sub roads are very narrow. So there is so much traffic in these roads. Therefore to implement QMS at first have to develop infrastructure.

3.4. **Issues of implementation Quality Management System in BD garment industry:**

There are some issues behind implementation of quality management system in Bangladeshi garments industry. Because of these reason the owner of garments industry influence to implement Quality Management System. From the data findings the following things are found-

3.4.1. **Customer Satisfaction:** All of six respondents agreed that when they started to follow QMS in their garments customers are much happier than before. Because one of the respondent said after following QMS product quality increased as well as we can delivery product time to time. Each and every department we check quality. We can meet buyer’s requirement.

3.4.2. **Product Quality:** Product quality is very important factor for any industry. Here all respondents said that they can produce better quality product after following quality management system.

3.4.3. **Employee Satisfaction:** After following QMS employees are doing less work and producing more products said one respondents. So employees are also satisfied with system. Indeed the defects of products are becoming very less than before. Another respondent said they don’t have to do one work again and again because they can complete their work at a time by this process.
3.4.4. **Get order from renowned brand:** One respondent said now a day’s buyers are very conscious about product quality. Only possible to ensure quality is to implement quality management system. So those garments have already implemented QMS, buyers are satisfied with them and they are getting order from renowned brand such as Zara, Ralph Loren, UniQlo etc.

3.4.5. **Waste Management:** Waste can be reduced by following QMS system. One respondent said by following quality management system, defects are very less. We can also make sure the quality of product. We check every section very carefully. So it’s very less chance to waste.

3.4.6. **Time to Time delivery:** Quality Management system makes production very fast with good quality. All of the respondents agreed that after getting order they can make shipment on time. In this case buyers are also satisfied.

4. **RECOMMENDATION:**

- Every garment factory should implement different tools like 5’S, 6 Sigma etc in order to proper quality management.

- Most of the garments follow 4 point system to inspect fabrics quality. But 4-point system has some limitations so that this system should be used with proper care.

- Govt of Bangladesh should take proper step in this bright sector. They can arrange proper step to take loan or financial help in order to implement perfect quality management system.

- The proper training should be provided those are quality related people.

- Make awareness about quality management system. Such as to ensure every employees of garments industry have to have knowledge about this.

- Provide proper motivation to the employees as well as owner of the garments.

5. **CONCLUSION:**

In Bangladesh Garments industry is thriving sector and its growth is incredible. To uphold the improvement and keep the growth rate high necessity of Quality Management System is essential. Indeed QMS is not destination fairly it expedition and it has no end. Now a day’s buyers are very conscious about their product quality. So each and every garments producer should give first preference to its valuable buyers. In this case if it’s possible to maintain quality management system in organized way, the buyers will be convinced to give more orders in Bangladesh. From the research it’s proved that it’s possible to implement QMS in Bangladeshi garments industry, then Bangladesh can lead in this sector. The owners and the employees of garments
industry should consider the fact.

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THE FACTORS INFLUENCING CUSTOMER SATISFACTION
WITH CHAIN BUDGET HOTELS IN BANGKOK BY EACH TRAVELER SEGMENT

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ABSTRACT
This study developed and tested a model to predict customer satisfaction (SAT) with chain budget hotel in Bangkok, Thailand. Our research is to find which factors that influence customers’ satisfaction, how it influences and then by traveler segment. Besides, we would like to test new independent variable "eco-tangible"; physical facilities that were environmentally appropriate and equipment that minimizes environmental degradation, to customer satisfaction in chain budget hotel business section that is significant to SAT or not and how it influences. Data was collected from both customers who were staying at the time we collected and customers were recently experienced within 6 months. We did 200 online/offline questionnaires from 10 chain budget hotels in central business district in Bangkok only. We initially hypothesized 5 independent variables; hotel image, eco-tangible, physical quality, staff service quality and value for money had positive and direct effect on SAT. We used multiple regression to test the proposed SAT model. The result revealed differently a bit. Two new constructs were found; room quality and facility, which were originally physical quality construct variable. Thus, final SAT model consists of 6 independent variables and all constructs have positive relationship and direct effect to customer satisfaction. The final model has a good explanatory power with $R^2 = 72.3\%$. As room quality construct has highest correlation coefficient at 0.819 while value for money has correlation coefficient at 0.092, meaning that customers pay attention in room quality such as room cleanliness even it is budget hotel.
Introduction

The budget hotels in Thailand are likely to grow by the growth of low cost airline. Since cheaper airline ticket, middle management employees and their families including tourists travel more and more. The group of travelers spend time to travel outside the hotel rather than being within hotel. Therefore, this group of travelers need the basic requirement such as good location, safety, convenience and cleanliness (Bob, 2004; Wai-Ching & Kevin Lock-Teng, 2005). Even the european debt crisis, average of occupancy rate in budget hotel still was between 70%-80%. Not surprisingly, the giant public company in Thailand hotel business, CENTEL, has been planned to open new brand of 2 star hotel chain to serve the number of increasing travelers for AEC in 2015. Other than that, budget hotel business requires low investment, construction and operation, but good return. (manager, 2012; Pannell Kerr Forster, 1993). According to “green” or “environmental friendly” trend, many environmental conservation campaigns has been raised for the past 10 years and also applied to service business section. Referred to ECOSERV, there was found that the factor “eco-tangible” was statistically significant and was highest effect to service quality (Khan, 2003). Eco-tangible factor was applied and test in banking service section and found that there was positive and direct effect to bank’s customer satisfaction. (Sureshchandar, Chandrasekharan, & Anantharaman, 2002) Customer satisfaction strategy is one of efficient strategies (Anderson, Fornell, & Mazvancheryl, 2004) High level of customer satisfaction leads to loyalty and finally competitive advantage in business. Therefore, this study tested all factors that influenced to customer satisfaction in chain budget hotel in Bangkok, especially, eco-tangible factor has not been tested in hotel business section before.

1. Literature Review

In order to investigate the relationship between hotel image, eco-tangible, physical quality, service quality, and value for money as independent variable and customer satisfaction as dependent variable, we review literature of these predictors and dependent variable.

2.1 Customer Satisfaction (SAT)

The concept of satisfaction has been the subject of many controversies over the past 30 years. The current tendency is it as a phenomenon that is not directly observable and the result of two parallel processes-emotional and effective. However, the dominant paradigm states that satisfaction is the result of subjective comparison between initial expectations of a product or a service and the a posteriori perception of its performance. (Robinot & Giannelloni, 2010). Moreover, the short definition of satisfaction is the consumer fulfillment response (Yuksel, Philip, & Graham,
Satisfaction is posited as having both a cognitive component and an affective component. The cognitive component (referred to as “perceived service quality”) refers to a customer’s evaluation of a series of service attributes that constitute a service performance. The affective component (referred to as “emotional satisfaction”) consists of such emotions as anger, contentment, happiness, pleasure, irritation, and disappointment. (Riadh, 2009). The way to define satisfaction is depend on each researcher. Some researchers take both components to define satisfaction (Cronin Jr, Brady, & Hult, 2000).

2.2 Hotel Image

Prior to the research; An application of ECSI model as a predictor of satisfaction and loyalty for backpacker hostels in 2007, the researchers not also found “hotel image” construct variable has a positive and direct effect on perceived value but also found on customer satisfaction (Bill, Steven, & Christina, 2007). Image is also defined that it is based on customers’ beliefs about brand (Keller, 1993). Some researchers argued that image is a value-added antecedent determining satisfaction and loyalty (Grönroos, 2000). According to literature review, we have 15 items to define this latent variable (Bill et al., 2007; Knutson, 1988) such as hotel location, exterior design, interior design, atmosphere and reputation.

2.3 Eco-tangible

Eco-tangible is one of unobserved construct in ECOSERV model which is used to assess service quality in hotel business. ECOSERV model is adapted from SERQUAL model, developed by Parasuraman (1985), is a multiple-item instrument designed to measure customer expectation and perception concerning a service encounter (Parasuraman, Zeithaml, & Berry, 1985). Khan (2003) who developed ECOSERV model emphasized on the factor; Eco-tangible, that is environmentally friendly and sustainable development. Eco-tangible is defined as physical facilities that were environmentally appropriate and equipment that minimizes environmental degradation were found more important to the ecotourists. Eco-tangible has 3 items; appropriateness, minimizing degradation and environmentally safe (Khan, 2003).

2.4 Physical Quality

One of factors in SERQUAL model is physical quality, developed by Parasuraman et
to assess the general service quality (Parasuraman et al., 1985). Though there has been adapted and applied SERQUAL model to be many new models, physical quality is still the main predictor in the developed model in order to assess quality or satisfaction in service industry (Riadh, 2008; Tat & Raymond, 2000; Yuksel et al., 2008). Physical quality is defined as physical service either from hotel facilities or hotel staffs concerning surrounding and /or facilities such as cleanliness, comfortable accommodation and parking space (Bill et al., 2007; Yuksel et al., 2008). According to our literature review of this construct, we found 13 items such as availability of parking spaces, clean and comfortable of bed and pillow, comfortable accommodation, room cleanliness, room quietness, internet system (Bill et al., 2007; Tat & Raymond, 2000; Yuksel et al., 2008)

2.5 Staff Service quality
Unlike the physical quality, which can be objectively evaluated, staff service quality is intangible and subjectively determined by customers (Gro¨nroos, 2000). Both attributes of service product influence customers perception of value. Parasuraman et al (1985) suggest that friendliness, courtesy and personalized service are components of this attribute that contribute to SAT. Many researchers used this attribute to be the direct predictor to customer satisfaction in hotel industry business and also found that staff service quality has significantly positive and direct effect to SAT. Staff service quality is defined as customers’ perception is the result of experiencing with staffs behavior and service. According to our literature review, we found 7 items to indentify this predictor such as polite and friendly, helpful, neat appearance and willing to service (Bill et al., 2007; Tat & Raymond, 2000; Yuksel et al., 2008)

2.6 Value for money
Value for money is considerable as trade-off between price to pay and its quality or benefit (Sinha & DeSarbo, 1998). However, Zeithaml (1998) defined the definition of value for money as customers’ evaluation is compared between perceived value of product/service and its benefit which is based on perception of what they got and paid for it. Another support, perceived value between benefit and satisfaction that customer received is important for value for money. In marketing field, value is not limited in term of quality and price but social, emotion (Sheth, Newman, & Gross, 1991). Value for money is raised into many research topic because it has positive and direct effect on SAT. This factor plays important role to SAT as there was a research on level of satisfaction among asain and western travelers which the result indicated that asian travelers’s overall satisfaction is primarily derived from the value factor (Tat & Raymond, 2000; Wai-Ching & Kevin Lock-Teng, 2005). Moreover, asian travelers are tend to pay less relatively to western’s. Thus they searched to buy more for less which
agreed with previous research in 1990s that customers pay attention on product or service that is practical for use and careful in spending (Sellers, 1991). Therefore, the customers’ need trend is the combination with product quality, price and service. In order to capture future potential customer of chain budget hotel, value for money and various choices to travelers are top of customers’ mind to make a decision (Burton, 1990; Knutson, 1988). According to our literature review, we found 8 items to measure this unobserved variable such as reasonable price with room quality, reasonable price with food quality, reasonable price with reputation and reasonable price with hotel facilities (Bill et al., 2007; Tat & Raymond, 2000).

2. Model Development and Hypotheses

This section will demonstrate the customer satisfaction model for chain budget hotel in Bangkok which are consisted of all measure of all independent variable and dependent variable.

3.1 Proposed Customer Satisfaction Model

Fig.1 summarizes the proposed model for customer satisfaction model for chain budget hotel in Bangkok. All 5 independent variables; hotel image, eco-tangible, physical quality, service quality and value for money, predict 1 dependent variable; customer satisfaction (SAT). All measurable items are 27 items.
3.2 Hypothesizes

As fig. 1, we have all 5 hypotheses for the proposed model. All hypotheses are tested with 95% confidence level.

- **H1**: Hotel image has positive and direct effect on SAT
- **H2**: Eco-tangible has positive and direct effect on SAT
- **H3**: Physical quality has positive and direct effect on SAT
- **H4**: Staff service quality has positive and direct effect on SAT
- **H5**: Value for money has positive and direct effect on SAT

4. Research Method

The research methodology employed in this empirical study is the application of multiple regression analysis on a sample of persons who stayed and/or has been experienced within 6 months in 10 hotels which are at central business district in Bangkok.
4.1 Population, Sample and data Collection

We collected data from both online questionnaire and offline questionnaire (personally) who staying and/or has been experience within 6 months in selected 10 chain budget hotels; all season rajdamri, all season phayathai, all season huamak, aloft sukhumvit, holiday inn express pathumwan, ibis sukhumvit, ibis sathorn, ibis jaroennakorn, tune sukhumvit, imm fusion onnuch, during November – December 2012. The sample size is 200. We have completed answer from questionnaire due to efficiency in offline questionnaire and controllable online questionnaire.

4.2 Measures

All constructs described in SAT model are measured by using developed scales with some modification that fit with our research context—see Table 1. The response format was a five-point likert scale ranging from “total disagree” (1) to “total agree” (5).

Table 1: Measures used in this research

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel Image</td>
<td>IMG2. This hotel is located at good place and convenient for travelling.</td>
<td>.812</td>
</tr>
<tr>
<td></td>
<td>IMG5. This hotel is well-known and has good reputation.</td>
<td>.750</td>
</tr>
<tr>
<td></td>
<td>IMG4. This hotel atmosphere is suitable for staying.</td>
<td>.748</td>
</tr>
<tr>
<td></td>
<td>IMG3. This hotel decoration has good interior design.</td>
<td>.676</td>
</tr>
<tr>
<td></td>
<td>IMG1. This hotel is located at good place and convenient for travelling.</td>
<td>.544</td>
</tr>
<tr>
<td></td>
<td>5 items – Cronbach’s alpha = .784</td>
<td></td>
</tr>
<tr>
<td>Eco-tangible</td>
<td>ECO2. Hotel facilities cause minimizing degradation of natural resources.</td>
<td>.881</td>
</tr>
<tr>
<td></td>
<td>ECO1. This hotel building doesn’t cause a negative impact on the surrounding environmental scenery.</td>
<td>.870</td>
</tr>
<tr>
<td></td>
<td>ECO3. Hotel facilities are environmentally safe.</td>
<td>.825</td>
</tr>
<tr>
<td></td>
<td>ECO4. This hotel has a campaign to reduce waste and pollution to the environment.</td>
<td>.729</td>
</tr>
<tr>
<td></td>
<td>ECO5. This hotel is aware of energy saving</td>
<td>.563</td>
</tr>
<tr>
<td></td>
<td>5 items – Cronbach’s alpha = .867</td>
<td></td>
</tr>
<tr>
<td>Room Quality</td>
<td>PHY2. Bed and pillow is comfortable for sleeping.</td>
<td>.939</td>
</tr>
<tr>
<td></td>
<td>PHY3. This hotel room is clean.</td>
<td>.890</td>
</tr>
<tr>
<td>Facility</td>
<td>Description</td>
<td>Cronbach’s alpha</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>PHY4.</td>
<td>This hotel room is quiet and suitable for resting.</td>
<td>0.890</td>
</tr>
<tr>
<td>PHY5.</td>
<td>This hotel internet system is workable.</td>
<td>0.884</td>
</tr>
<tr>
<td>PHY1.</td>
<td>Parking is available for hotel guests.</td>
<td>0.779</td>
</tr>
<tr>
<td></td>
<td>3 items – Cronbach’s alpha = 0.941</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 items – Cronbach’s alpha = 0.700</td>
<td></td>
</tr>
<tr>
<td>Staff service</td>
<td>Description</td>
<td>Cronbach’s alpha</td>
</tr>
<tr>
<td>quality</td>
<td>SER4. Hotel staffs express a willingness to serve.</td>
<td>0.854</td>
</tr>
<tr>
<td></td>
<td>SER3. Hotel staffs are in neat appearance.</td>
<td>0.814</td>
</tr>
<tr>
<td></td>
<td>SER2. Hotel staffs are helpful to customer.</td>
<td>0.786</td>
</tr>
<tr>
<td></td>
<td>SER1. Hotel staffs are polite and friendly.</td>
<td>0.695</td>
</tr>
<tr>
<td></td>
<td>4 items – Cronbach’s alpha = 0.824</td>
<td></td>
</tr>
<tr>
<td>Value for money</td>
<td>Description</td>
<td>Cronbach’s alpha</td>
</tr>
<tr>
<td></td>
<td>VFM2. Hotel food and beverage are value for money.</td>
<td>0.884</td>
</tr>
<tr>
<td></td>
<td>VFM1. Hotel room quality is value for money.</td>
<td>0.884</td>
</tr>
<tr>
<td></td>
<td>VFM3. When I’m thinking of this hotel reputation, I feel that room price is not that expensive.</td>
<td>0.798</td>
</tr>
<tr>
<td></td>
<td>VFM4. Hotel facilities make me feel “value for money”.</td>
<td>0.783</td>
</tr>
<tr>
<td></td>
<td>4 items – Cronbach’s alpha = 0.895</td>
<td></td>
</tr>
</tbody>
</table>

5. The findings

5.1 Sample Characteristics

Of 200 respondents, 51.5% are female, 68% are Thais. All majority of respondents information are: age between 21-30 years (66%), objective for travelling (61%), 2-3 person per room (66.5%), Actual room price between 1,001-1,500 baht per night (52.5%).

5.2 Validity and Reliability

We calculated Cronbach’s alpha scores for each independent variable to test the reliability of all scales which was between 0.700 and 0.941. All reliability statistics were over 0.7 (table 1), which confirmed that items for each construct variable in SAT model have good reliability.

We used exploratory factor analysis utilizing principle component method for factor extraction and varimax rotation technique to examine the validity of each independent variable. Measurement items which has factor loading less than 0.5 were cut off. After running SPSS, we found no any items to be cut off. In turn, new construct variable happened named “facility” that loaded 2 items; PHY5 and PHY1, which splitted from “physical quality”. Therefore, we renamed the old “physical quality” to “room quality” which loaded 3 items; PHY2, PHY3, PHY4 (Table 1).
5.3 Hypothesizes Testing

In order to test direct effect of all 6 independent variables (4 original independent variables plus “room quality” and “facility”) on SAT model, we employed multiple regression analysis with factor scores by enter method. The result came out that all 6 construct variable has significant positive relationship with customer satisfaction (SAT) with adjusted $R^2 = 72.3\%$ which expressed good explanatory power (Table 2) and also have multiple regression equation for this study as belowed.

Customer Satisfaction = 0 + 0.819 (Room_Quality) + 0.139 (Hotel Image) + 0.132 (Ecotangible) + 0.092 (Value_For_money) + 0.076 (Service_Quality) + 0.101 (Facility)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Eco-tangible</td>
<td>.132</td>
<td>.037</td>
<td>.132</td>
<td>3.541</td>
</tr>
<tr>
<td>Value for money</td>
<td>.092</td>
<td>.037</td>
<td>.092</td>
<td>2.467</td>
</tr>
<tr>
<td>Room quality</td>
<td>.819</td>
<td>.037</td>
<td>.819</td>
<td>22.004</td>
</tr>
<tr>
<td>Service quality</td>
<td>.076</td>
<td>.037</td>
<td>.076</td>
<td>2.052</td>
</tr>
<tr>
<td>Hotel Image</td>
<td>.139</td>
<td>.037</td>
<td>.139</td>
<td>3.735</td>
</tr>
<tr>
<td>Facility</td>
<td>.101</td>
<td>.037</td>
<td>.101</td>
<td>2.715</td>
</tr>
</tbody>
</table>

Dependent variable : SAT $ R^2 = .731$, Adjusted $ R^2 = .723$

After all the test, we have a new customer satisfaction model (SAT model) with chain budget hotel in Bangkok (Figure2)
6. Conclusions

As the result, we found 6 independent variables; hotel image, eco-tangible, room quality, facility, staff service quality and value for money all have positive effect and direct relationship to customer satisfaction with chain budget hotel in Bangkok especially eco-tangible construct variable which haven’t tested in hotel section before. By the way, the outstanding factor which is highest relationship with customer satisfaction is room quality, which is consistent with the prior study in budget hotel in UK (Bob, 2004) but not consistent with the study in hotel in Hongkong which value for money construct variable is significant and highest relationship to customer satisfaction. This might be because respondents of this research also have 32% non-thai travelers and we focused only chain budget hotels which room rates per night are normally higher a bit relatively to non-chain budget hotel. Therefore, this research continued to analyst sample data by traveler segment as thai, non thai, leisure and business traveler segment as shown bellowed.

7. The Factors Influencing SAT by each traveler segment
There was several research paper, which found that the different group of hotel customer has interestingly a different demand and preference on the hotel (Bauer, Jago, & Wise, 1993; Oh & Mount, 1998; Tat & Raymond, 2000). In a previous research, Bauer, Jago and Wise (1993) argued that the different nationality, Asian vs. Asian guest and Business guest vs. Leisure guest had different important factors and demands of the hotel services. Likely, the research of Tat and Raymond (2000) also found that Asian and Western travelers had different influential factors in determining the satisfaction. While, there was some area of hotel factor that seen as a common emphasis at the same level among both Asian and Western travelers (Tat & Raymond, 2000). Moreover, Oh and Mount (1998) remarked that a between repeat and new customer developed their return intention based on different aspects of service performances. The result of these previous researches produced several important implication for hotel marketers. As different group of target customer trended to consider the hotel’s service performance in and develop their patronizing behavior differently, which based on various area-specific service performance (Oh & Mount, 1998). Therefore, It is crucial that hotel operators and marketers should treat a different type of customer separately for the purpose of understanding the market as well as developing an effective marketing mix and allocating resources for a particular group of target customer in the right direction (Bauer et al., 1993; Oh & Mount, 1998; Tat & Raymond, 2000).

As Bangkok is a capital city and also a city of tourism, there are thais and non-thais with different traveler purposes; leisure and business one, for all over the year. During high tourism season, hotel operators and marketers will focus on leisure traveler especially non-thais. During low tourism season, they need business travelers group and/or thais to fulfill unoccupied roomnights. Therefore, the research have kept more analysis by thais or non thais and by travelers purpose to understand how each customer emphasize on different hotel service performance. This makes hotel operator do the right marketing strategy and action plan.

7.1 By nationality

7.1.1 Thai Traveler Segment

As Thais sample we collected on this research, room quality factor still be the most important factor. The factors influencing customer satisfaction which comes in second, third
are hotel image and facility, respectively. Eco-tangible factor is the least significant contribution to explain customer satisfaction.

![Model Summary Table](image)

### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.939</td>
<td>0.826</td>
<td>0.818</td>
<td>0.37530793</td>
</tr>
</tbody>
</table>

- **Predictors**: Facility, Room_Quality, Ecotangible, Value_For_money, Image, Service_Quality
- For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable explained by regression. This CANNOT be compared to R Square for models which include an intercept.

![Coefficients Table](image)

### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ecotangible</td>
<td>Value_For_money</td>
</tr>
<tr>
<td></td>
<td>0.70</td>
<td>0.039</td>
</tr>
<tr>
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<td>0.045</td>
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<td></td>
<td>2.257</td>
<td>1.220</td>
</tr>
<tr>
<td></td>
<td>.026</td>
<td>.225</td>
</tr>
</tbody>
</table>

- **Dependent Variable**: Customer_Satisfaction
- **Linear Regression through the Origin**

### 7.1.2 Non-Thai Traveler Segment

As non-Thais sample we collected on this research, room quality factor still be the most important factor same as in Thais traveler segment. The factors influencing customer satisfaction which comes in second, third are eco-tangible, value for money, respectively. Whereas, hotel Image factor is the least strategic importance or influential in determining customer satisfaction.
Conclusion

Room quality factor is the most important and influence effect factor for both thai and non-thai traveler. This result differs from a previous research in hongkong; Tat and Raymond (2000), which room quality factor is the most important factor for western travelers while value for money factor comes first for asian travelers. Obviously, the major differences between two groups are eco-tangible and hotel image factor. Eco-tangible factor comes in second for non-thai travelers, but on the other hand it comes in the least for thai travelers. While hotel image factor comes in second for thai travellers, but on the other hand it comes in the least for non-thai travellers. Other hotel factors seem to be less strategic important or less influential in determining customer satisfaction among both Thai and non-Thai traveler. Facility factor for thai travlers has significantly effect on customer satisfaction but for non-thai group, it turns the opposite. This is because non-thai travellers gives importance to value for money factor. In this research, staff service quality has an insignificant contribution to explain customer satisfaction for both group in the segment of budget chain hotel.

7.2 By business purposes
7.2.1 Leisure Traveler Segment:

As leisure traveler sample we collected on this research, room quality factor still be the most important factor. The factors influencing customer satisfaction which comes in second, third, fourth are staff service quality, facility and value for money, respectively. Image factor is the least strategic important factor for customer satisfaction in holiday guest category.

![Model Summary Table]

**Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Ecotangible</th>
<th>Value_For_money</th>
<th>Room_Quality</th>
<th>Service_Quality</th>
<th>Image</th>
<th>Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.072</td>
<td>.094</td>
<td>.705</td>
<td>.179</td>
<td>.082</td>
<td>.120</td>
</tr>
<tr>
<td></td>
<td>.041</td>
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<td>.053</td>
<td>.037</td>
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<td>.044</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Customer_Satisfaction
b. Linear Regression through the Origin

7.2.2 Business Traveler Segment:

As business traveler sample we collected on this research, room quality factor still be the most important factor. The factors influencing customer satisfaction which comes in second, third are facility and hotel image, respectively. Staff service quality, value for money and eco-tangible factor have an insignificant contribution to explain customer satisfaction in the business traveler segment.
conclusion

As a result of this research, room quality is factor that has the most significant and important to all segments which is similar to Cho and Choi (2000) found that room quality is main factor for leisure and business travelers. Besides, this research also found that business travelers give importance to facility factor such as hotel internet, hotel parking lot more than leisure travelers which is similar to Bauer et al., (1993). Hotel Image factor is the least strategic importance or influential in determining customer satisfaction for both leisure and business traveler segment. For service quality factor, there has significantly effect on satisfaction for leisure traveler segment but turns into insignificant for business traveler segment.

Applications for hotel marketers

As a result of this research, it will be useful to hotel marketer for chain budget hotel in bangkok to know which factors that targeted customer group give importance to and which factors that they are looking for. Therefore, the right strategies and action plan will lead to increase the customer satisfaction and sale volume easily then.

References


Bill, Chitty, Steven, Ward, & Christina, Chua. (2007). An application of the ECSI model as a predictor of


BEHAVIOURAL PREDICTORS OF EMPLOYEE TURNOVER INTENTION IN SOUTHWEST NIGERIA

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Abstract
This study examined behavioural predictors (interpersonal relationship and perceived organisational support) of employee turnover intention in southwest Nigeria. The study adopted correlational research design. A sample of 248 workers were randomly selected from Airtel Company. To undertake these, three hypotheses were raised. Reliable scales were used in collecting data. The data were analysed using Pearson’s product moment correlation, Multiple regression analysis.

The result showed that interpersonal relationship and perceived organisational support negatively correlated with employee turnover intention. There were also combined effect of the independent variables (interpersonal relationship and perceived organisational support) to the prediction of company workers turnover intention. This suggested that the two factors combined accounted for 66.4% (Adj.R² = .104) variation in the prediction of company workers’ turnover intention. The most potent factor was perceived organisational support; followed by interpersonal relationship. Among others, it was recommended that organisations are enjoined to include in their policies organizational provisions for the support of workers such as health provision, end of the year package, leave bonus, car loan, e.tc, it was also recommended that the personnel manager or psychologist of the organizations should build interpersonal relationship with other members of staff irrespective of their cadre. More so, workers should be frequently changed from one section to the order so as to promote interpersonal relationship. However, inference was drawn that an increase in perceived organisational support and interpersonal relationships will reduce the tendency of company workers’ turnover intention.

Key words:
Interpersonal relationship, perceived organisational support, turnover intention.

Introduction
Organizational change initiatives such as downsizing, represents some of the most profound (Gandolfi, 2008) and problematic issues facing modern-day corporations, nonprofit organizations, governmental
agencies, and global workforces (Carbery & Garavan, 2005). Corporate restructuring, or simply ‘restructuring’, is a relatively broad concept. Black and Edwards (2000), for instance, define restructuring as a major change in the composition of a firm’s assets combined with a major change in its organizational direction and strategy (Suppayah, 2010). The goal of every organisation is to make high productivity, profit (especially if it is a profit-oriented organisation), and render good quality of services. These goals can only be realised with employees’ efforts, supports and contributions. This is because employees are partly responsible for the achievement of organization’s goals and strategy. But when these employees are thinking of quitting or leaving (i.e., turnover intention) the jobs and the organization, the aims and objectives of the organisation might not be achieved. This is because turnover intention is a negative job attitude that could results to employees’ turnover (i.e., loss of employee). Loss of employees may have a detrimental effect on the organisational performance, productivity, and effectiveness. It may also increase the recruitment, selection, and training cost and increase the workload of the remaining employees in the organisation.

Turnover intention has become a term mostly associated with the service providers and manufacturing companies in Nigeria. Most of this companies assumed that the best way to make profit is by reducing their workforce, some of them feels unskilled labour will do better than skilled labour since there is no employment agreement between the company and the unskilled labour force, which is quite unsystematic. The negotiations reported by THISDAY on the meeting between the management of Spanco and Techmahindra (Customer service agents of Airtel Telecommunication) and the national leaders of NUPTE (National Union of Postal and Telecommunication Employees) which was on the intention of Airtel management to lay off 50 per cent of its workforce. The management is also considering a reduction of salaries by 60 per cent under a renegotiated agreement in the contract of the affected workers (THISDAY NEWSPAPER, 2011). The report affirmed that the meeting ended up in a stalemate as the union leaders outrightly rejected the management’s proposal which consequently led to the declaration of an indefinite industrial action. Similar act is found among manufacturing companies who daily layoff skilled labour for unskilled labour to reduce cost, yet many of this companies have no friendly atmosphere at all. Many of their staff have no time for their family and other social engagement, they are just meant to serve the company alone which is quite inhuman.

Employee Turnover is the ratio of the number of workers that had to be replaced in a given time period to the average number of workers (Agnes, 1999). In simpler terms, employee turnover is the series of actions that it takes from the employee leaving to his or her being replaced. It is often utilized as an indicator of company performance and can easily be observed negatively towards the organization’s efficiency and effectiveness (Glebbeek & Bax, 2004). It is defined (Price, 1977) as: the ratio of the number of organizational members who have left during the period being considered divided by the average number of people in that organization during the period. Frequently, managers refer to turnover as the entire process associated with filling a vacancy: each time a position is vacated, either voluntarily or involuntarily, a new employee must be hired and trained. This replacement cycle is known as turnover (Woods, 1995).

Perceived organizational support has been observed to be associated with turn-over intention among
workers. Employees willingness to quit job can be due to excessive workload and lack of Perceived Organizational Support (POS) that ultimately can start a progression of job dissatisfaction, turnover intention (TI) and in conclusion turnover (Price et al, 1981; Tett et al, 1993; Hussain & Asif, 2012). According to organizational support theory, if employees perceive more support from the organization, they are likely to develop more positive outlook towards the organization (Eiesnberger et al, 1986). Correspondingly, it is explored by Allen et al. (2003) that POS is negatively correlated with turnover intention and actual turnover. Since employees often respond to their organizations in kind (Sherony and Green, 2002), it is rational to anticipate that, POS will influence a strong desire to stay with the organization.

Employees feel obliged to repay organization with extra effort and loyalty when such favorable supportive treatments are discretionary-based (Eisenberger, Cummings, Armeli, & Lynch, 1997; Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). POS can be defined as “employees’ global beliefs concerning the extent to which organization values their contributions and cares about their well-being”, it is termed perceived organizational support (POS). To date, POS literature has been widely examined in relation to human resource (HR) policies with the aim of understanding employees’ behavior and attitudes. Yet the mechanisms of how POS exerts influence on important HR policies and the mechanism to explain turnover intentions in knowledge-intensive organizations require further investigation.

Metaanalysis of over 70 studies by Rhoades and Eisenberger (2002) reported consistent antecedents and consequences of POS. However, the burgeoning research into POS did not adequately examine the influence of POS between organizational actions and employees turnover. One study reported POS as mediator for human resource management practices (HRMP) (Meyer & Smith, 2000) with organizational commitment, the other two reported POS mediates supportive HR practices (Allen, Shore, & Griffeth, 2003), and job conditions (Stinglhamber & Vandenberghe, 2003) on turnover via organizational commitment and job satisfaction. Two studies associated POS with actual turnover, using rewards, procedural justice, and supervisory support (Rhoades, Eisenberger, & Armeli, 2001; Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002).

It has also been observed that workplace interpersonal relationship influences workers turn-over intention. As employees spend a large portion of their lives at work, interpersonal relationships and friendships between/among employees at work are often formed. According to a Gallup survey, about 30% of employees in the U.S. responded that they had a best friend in their workplace (Rath, 2006). Further, the survey reported that slightly over half (51%) of those who responded that they have a best friend at work reported that they work with passion and feel a profound connection to the company, compared with only 10% of those who have no best friend. Also, 75% of respondents who had a best friend at work planned to be with the company for at least another year, compared with 51% who didn't have a best friend. Similarly, researchers have consistently reported that workplace friendship (WF) positively affects employees’ work-related attitudes and behaviors which, in turn, enhance organizational outcomes. People may gain help, assistance, guidance, advice, feedback, recommendations, or information from workplace friends on a variety of work-related matters such as completing jobs, performing tasks, and handling issues with
co-workers, subordinates, supervisors, and/or clients (Hamilton, 2007).
Interpersonal relationship has been considered valuable for both individuals and organizations. According to Fine (1986), interpersonal relationship increases support and resources that help individuals to accomplish their job, reduce work stress, and provide increased communication, cooperation, and energy. Hamilton (2007) also suggested that when in a friendship at work, people might feel comfortable with their workplace friends and reduce feelings of insecurity and uncertainty. They also share more information and empathies with workplace friends about work-related problems and concerns. Jehn and Shah (1997) further argued that employees in a friendship exchange words of encouragement, confidence, trust, respect, and critical feedback, which may increase enthusiasm and a positive attitude. Based on these functional values of interpersonal relationship, previous empirical research in psychology, sociology, and management commonly revealed that interpersonal relationship can influence employees’ work-related attitudes, intentions, and behaviors such as job satisfaction, organizational citizenship behaviour, job performance, turnover intention, and absenteeism (Riordan & Griffeth, 1995; Ross, 1997). Dotan (2007) suggested that when employees have trustful friends at work, they can get help or advice from their friend-coworkers and, therefore, gain feelings of security, comfort, and satisfaction with their job at work. Also, employees in friendship tend to engage in altruistic behaviors by providing co-workers with help, guide, advice, feedback, recommendation, or information on various work-related matters (Hamilton, 2007). This aspect of interpersonal relationship as a source of work assistance is linked to the altruism dimension of organizational citizenship behaviour. Research further suggested that interpersonal relationship may enhance organizational performance because employees in friendships like to help each other with tasks, communicate with morale-building behaviors, have few communication difficulties and thus can increase their effort and rate of production (Bandura, 1982). Additionally, research has shown that individuals who have a close friend at work are less likely to be absent or leave the organization than individuals who do not because they gain a sense of belonging and obligation to the workplace friends who have accepted, understood, and helped them at work (Morrison, 2004; Sias & Cahill, 1998).

Turnover intention or intention to quit or leave (as used interchangeably in literature) is an individual desire or willingness to quit or leave employer organisation (Tett & Mayer, 1993; Elangovan, 2001). According to Price (2001), it is not just intending to quit the location, but the work role, the job, and also the organisation. Turnover intention has been found to be one of the major determinants of turnover behaviour (i.e., quitting behaviour) (e.g., Price, 2001; Brigham, Castro, & Shepherd, 2007). Therefore, when employees nurture turnover intention and this is not checked, it might result to high loss of employees (i.e., employees’ turnover). Loss of employees or employees’ turnover can cause psychological distress, reduce productivity, quality of service, and increase recruitment cost (Powell & York, 1992; Mourad & Mustapha, 2007). It can also lead to work overload, mistrust, disruption in workflow, and further turnover (Wagner, 2010; Miller, 2010). Considerable amount of researches has been carried out on service provider (Airtel) employees in Nigeria, most of these studies paid more research attention to productivity (Oloyede, 2006), organisational commitment (Oluwafemi & Balogun, 2008), occupational burnout (Oungbamila, 2010), and fraudulent
intent (Owolabi & Babalola, 2011). Meanwhile, less research attention has been devoted to employees’ turnover intention. Specifically, there is paucity of empirical studies on the influence of perceived organizational support and interpersonal relationship on turnover intention of service provider (Airtel) employees in Nigeria which is the focus of this study.

**Purpose of the Study**

The broad objective of this study was to investigate perceived organizational support and interpersonal relationship as predictors of employee turnover intention. Specifically, it;

I. Investigated the relationship that exists between perceived organizational support and turnover intention among Airtel workers.

II. Investigated the relationship that exists between interpersonal relationship and turnover intention among Airtel workers.

III. Determined if perceived organizational support and interpersonal relationship will jointly and independently influence turnover intention among Airtel workers.

**Hypotheses**

The following directional hypotheses were tested at 0.05 level of significance

I. There will be a positive relationship between perceived organisational support and turnover intention of company workers in southwest.

II. There will be a positive relationship between interpersonal relationship and turnover intention of company workers in southwest.

III. A combination of independent variables (interpersonal relationship and perceived organisational support) of company workers will jointly and independently predict turnover intention.

**Research Design**

This study adopted correlational research design. This design is appropriate because the researcher did not manipulate any variable in the study. The opinions of the workers differ across sex, age and years of experience. The independent variables in the study are perceived organizational support and interpersonal relationship. The dependent variable in the study is Airtel worker turnover intention.

**Population**

The population of the study comprises of all workers of Airtel in Lagos State and Ogun State.

**Sampling Procedure**

Random sampling technique was used to select 248 (two hundred and forty eight) participants for the study involving all department in Airtel. In doing this, 124 respondents were involved from each state. Random sampling was used so as to give all members of the company equal chance to be chosen.
**Instrument**

The instrument the researchers used for the data collection was a self-reported structured questionnaire. The questionnaire has the following sections:

**Section A: Demographic Factors**

This section consists of demographic characteristics such as sex, age, marital status and rank.

**Section B: Perceived Organisational Support Scale**

This section measures perceived organizational support using 19-item scale developed by Eisenberger, Fasolo, and Davis-LaMastro (1990). The authors reported reliability estimates range from .81 to .89. The response format consisted of a 5-point likert type ranging from (1 = Strongly Disagree to 5= strongly agree). Reliability coefficient for the present study was 0.84.

**Section C- Interpersonal Relationship Scale**

This section measures interpersonal relationship using 25-item scale developed by Kratzke (1976) with internal reliability of .74. The 25 item scale had a response format of a 5–point format with (1- strongly disagree to 5= strongly agree). Reliability coefficient for the present study was 0.75.

**Section D- Turnover Intention Scale**

This section measures turnover intention using 6-item scale developed by Camman, Fichman, Jenkins and Klesh (2000) Intention Turnover Scale with internal reliability of .83. The six item scale had a response format of a seven–point format with (1- strongly disagree to 7= strongly agree). Reliability coefficient for the present study was 0.81.

**Procedure for Data Collection**

Copies of the questionnaires were administered to the participants in their various branches of Airtel Company at Lagos and Ogun State. This was made possible with the help the managing co-coordinator/directors of Airtel Company (at every branch) whose permissions were first sought. The participants were adequately briefed on the need to cooperate with the researcher. They were also assured of confidentiality of their responses. The data collection spread over two weeks, during which about 250 questionnaires was administered, but only 248 was suitable for the study; these were scored and the data obtained were subjected to data analysis.

**Method of Data Analysis**

The data was collected and analysed with the aid of T-test, Pearson’s’ product moment correlation and multiple linear regression to test the four research hypothesis at 0.05 significant level which was used for the interpretation.

**Results**

The personal characteristics of the respondents such as sex, age-range and years in services are presented in the table below.

**Table 1:**Summary of descriptive statistics table showing participants turnover intention level based
on their sex, age, rank, marital status, years in service and qualification.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>162</td>
<td>70.5123</td>
<td>10.54552</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
</tr>
<tr>
<td>Female</td>
<td>86</td>
<td>58.4302</td>
<td>9.74443</td>
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<tr>
<td><strong>Age group</strong></td>
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<tr>
<td>Young</td>
<td>131</td>
<td>48.0902</td>
<td>7.58034</td>
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</tr>
<tr>
<td>Old</td>
<td>117</td>
<td>45.8810</td>
<td>7.82469</td>
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</tr>
<tr>
<td><strong>Rank</strong></td>
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</tr>
<tr>
<td>Senior staff</td>
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<td>46.9722</td>
<td>9.34570</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
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<tr>
<td>Junior staff</td>
<td>214</td>
<td>47.0224</td>
<td>7.50282</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
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<tr>
<td><strong>Marital Status</strong></td>
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<tr>
<td>Married</td>
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<td>47.2678</td>
<td>7.23008</td>
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<tr>
<td>Single</td>
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<td>46.59</td>
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<td>Separated</td>
<td>9</td>
<td>45.00</td>
<td>9.434</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
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<tr>
<td><strong>Years in Service</strong></td>
<td></td>
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<tr>
<td>Short years</td>
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<td>47.16</td>
<td>8.433</td>
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<tr>
<td>Long years</td>
<td>89</td>
<td>46.74</td>
<td>6.357</td>
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<tr>
<td><strong>Qualification</strong></td>
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<tr>
<td>ND</td>
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<tr>
<td>HND</td>
<td>79</td>
<td>45.44</td>
<td>6.876</td>
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<tr>
<td>BSC</td>
<td>119</td>
<td>47.42</td>
<td>7.382</td>
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<tr>
<td>MSC</td>
<td>9</td>
<td>51.56</td>
<td>7.859</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Source: Field Survey

Table 1 above shows that female (mean=58.43) workers exhibit a fairly low turnover intention than male workers (mean=70.51). The table also reveals that workers who are young in age (mean=48.09) display a higher turnover intention than the older ones (mean=45.88). The table further shows that workers with shorter years in service (mean=47.16) displayed a higher turnover intention than those with longer years in service (mean=46.74). Workers who are junior (mean=47.02) displayed a moderately high turnover intention than those who are senior (mean=46.97). Workers who are married (mean=47.27) displayed a higher turnover intention than those who are singles (mean=46.59) and separated (mean=45.00). The table also shows that workers with MSC qualification (mean=51.56) displayed the highest form of turnover intention. Followed by those with ND (mean=47.49), BSC (mean=47.42) and HND (mean=45.44).
Research hypothesis 1:

There will be a positive relationship between perceived organisational support and turnover intention of company workers in southwest.

Table 2: Pearson correlation summary table showing relationship between perceived organisational support and turnover intention.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>St.Dev</th>
<th>Df</th>
<th>r</th>
<th>P</th>
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<tbody>
<tr>
<td>Turnover intention</td>
<td>248</td>
<td>68.0887</td>
<td>13.2255</td>
<td>246</td>
<td>.784**</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Perceived organisational support</td>
<td>248</td>
<td>66.3226</td>
<td>11.7628</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey

Table 2 reveals that there is a significant relationship between perceived organisational support and turnover intention; $r_{(246)} = .784$, $P<.001$. This implies that the hypothesis is confirmed. The table further reveals that perceived organisational support had positive correlation with turnover intention. This implies that a unit increase in healthy perceived organisational support will increase the tendency for workers to display high performance. Coefficient of determination ($r^2$) = 0.615. This denotes that perceived organisational support for workers had very large effect on their turnover intention. That is, perceived organisational support accounts for 61.5% variation in workers turnover intention.

Research hypothesis 2:

There will be a positive relationship between interpersonal relationship and turnover intention of company workers in southwest.

Table 3: Pearson correlation summary table showing relationship between interpersonal relationships and turnover intention.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>St.Dev</th>
<th>Df</th>
<th>r</th>
<th>P</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover intention</td>
<td>248</td>
<td>68.0887</td>
<td>13.2255</td>
<td>246</td>
<td>.533**</td>
<td>&lt;.001</td>
<td>H2 confirmed</td>
</tr>
<tr>
<td>Interpersonal relationship</td>
<td>248</td>
<td>84.6250</td>
<td>12.4230</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey

Table 3 reveals that there is a significant relationship between interpersonal relationships and turnover intention; $r_{(246)} = .533$, $P<.001$. This implies that the hypothesis is confirmed. The table further reveals that interpersonal relationships had positive correlation with turnover intention. This implies that a unit increase in interpersonal relationships will increase the tendency for workers to display high performance. Coefficient of determination ($r^2$) = 0.284. This denotes that interpersonal relationships of workers had large effect on their turnover intention. That is, interpersonal relationship accounts for 28.4% variation in
workers turnover intention.

**Research hypothesis 3:**

A combination of independent variables (interpersonal relationship and perceived organisational support) of company workers will jointly and independently predict turnover intention.

Table 4: Summary of regression for the joint and relative contributions of independent variables to the prediction of turnover intention.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Beta</th>
<th>t-value</th>
<th>Sig</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-1.383</td>
<td>.168</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal relationships</td>
<td>.249</td>
<td>6.133</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived organisational support</td>
<td>.681</td>
<td>16.768</td>
<td>.000</td>
<td>.816</td>
<td>.666</td>
<td>244.703</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Source: Field Survey

Table 4 above reveals a significant combined effect of the independent variables (interpersonal relationship and perceived organisational support) to the prediction of workers turnover intention. The result yielded a coefficient of multiple regressions \( R = 0.816 \), multiple R-square = 0.666 and Adjusted R square = 0.664.

This suggests that the two factors combined accounted for 66.4\% (Adj.R² = .104) variation in the prediction of gas companies’ workers’ turnover intention. The other factors accounting for the remaining 33.6\% are beyond the scope of this study. The ANOVA result from the regression analysis shows that there was a significant joint effect of the independent variables on the dependent variable, \( F (2,245) = 244.7, P<0.001 \). Therefore, the hypothesis is confirmed.

Table 4 further shows that the two factors (interpersonal relationship and perceived organisational support) are potent predictors of workers turnover intention. The most potent factor was perceived organisational support (Beta = .681, t = 16.768, P<0.001); followed by interpersonal relationship (Beta = .249, t = 6.133, P<0.001). The table further reveals that an increase in perceived organizational support and interpersonal relationships will increase the tendency for workers’ turnover intention.

**Discussion of findings**

The first hypothesis states that there will be a positive relationship between perceived organisational support and turnover intention of company workers in southwest. The result revealed that there was a significant relationship between perceived organisational support and turnover intention. This implies that the hypothesis is confirmed. The table further revealed that perceived organisational support had negative correlation with turnover intention. This implies that a unit increase in healthy perceived organisational support will reduce the tendency of company workers to display high turnover intention. The result corroborates with Guzzo et al. (1994) who found that expatriate managers who perceive higher levels of
support from the organization were less likely to seek employment elsewhere. The negative relationship between POS and turnover intention was also evident in some other studies (e.g., Wayne et al., 1997; Eisenberger et al., 2001). Rhoades and Eisenberger (2002) concluded that desire to remain with an organization had a large, positive relationship with POS. According to organizational support theory, if employees perceive more support from the organization, they are likely to develop more positive attitudes towards the organization (Eisenberger et al., 1986). For example Eisenberger et al., (1986) found that observations of support from the organization reduced absenteeism and increased organization citizenship behavior and employee performance (Eisenberger et al., 1990). High levels of POS are believed to persuade thoughts of trust and strong feelings of classification with the organization (Rhoades and Eisenberger, 2002).

Hypothesis two states that there will be a positive relationship between interpersonal relationship and turnover intention of company workers in southwest. The result showed that there was a significant relationship between interpersonal relationships and turnover intention. This implies that the hypothesis is confirmed. The table further revealed that interpersonal relationships had negative correlation with turnover intention. This implies that a unit increase in interpersonal relationships will reduce the tendency of a company worker to display high turnover intention. This finding is in support of the reports of Gerstner & Day, (1997), cited in Harris, Wheeler & Kacmar, and (2009) who found in their separate studies that, the satisfaction of relationship with superiors is found negatively correlated with turnover rate. In the same vein, Eatough (2010) reported that work-related behaviour and situations such as management style, limited resources availability, incorrect job instruction and fairness are the causes of interpersonal conflict with supervisors. Perceived fairness, or perceived equity, plays a critical role in how employees perceive their workplace treatment. This is an indication that a company where there is a uniform or interesting relationship between superior and subordinate as well as among the subordinate the tendency of thinking of quitting such will be low.

Hypothesis three states that a combination of independent variables (interpersonal relationship and perceived organisational support) of company workers will jointly and independently predict turnover intention. The result showed that a significant combined effect of the independent variables (interpersonal relationship and perceived organisational support) to the prediction of company workers turnover intention. This suggested that the two factors combined accounted for 66.4% variation in the prediction of company workers’ turnover intention. The result corroborates Khatri et al (2001) who reported that the procedural justice is negatively correlated to turnover intention while distributive justice is not. Likewise, Macaulay (1989) was two of the pioneers studying the correlation between turnover rate, performance and profitability. In their study they highlighted the linkage and alerted hospitality employers to the harm associated with high employee turnover rates on the business profitability.

Based on the predictive potential of perceived organizational support on employee turnover intention; the result corroborates Allen et al. (2003) argued, March and Simon’s (1958) ground work on the inducements-contributions, relationship between the organization and the employees also indicates that employees who receive more support as part of the inducements offered by the organization would have
less desire to leave the organization.

The finding also corroborate the notion of Sherony and Green, (2002) who reveals that since employees often respond positively to the support they receive from their organizations, hence it is expected that POS will encourage a strong longing to stay with the organization. Eisenberger et al. (1990) perceived that individuals with high POS would be less likely to search for alternative employment in other organizations. On the other hand, Allen et al. (2003) found that POS was negatively correlated with turnover intention and actual turnover. Onyinyi (2003) investigated the relationship between POS and organizational commitment among health workers and found a weak but significant relationship between the two variables. In the same way, Makanjee et al. (2006) found that POS positively influenced radiographers’ organizational commitment in South African hospitals.

Conclusion

In an attempt to examine the influence of perceived organizational support and interpersonal relationship on employee turnover intention among service provider and manufacturing company. The result confirmed a significant combined effect of the independent variables (interpersonal relationship and perceived organisational support) to the prediction of company workers turnover intention. The most potent factor was perceived organisational support, followed by interpersonal relationship. The result further reveals that an increase in perceived organisational support and interpersonal relationships will reduce the tendency for company workers’ turnover intention.

Recommendations

With respect to the findings made so far the following are recommended;

- Organisations are enjoined to include in their policies organizational provisions for the support of workers such as health provision for themselves and family, end of their package, leave bonus, car loan, e.t.c
- The management of the organizations should build friendship among staff irrespective of the cadre.
- Workers should be frequently changed from one section to the order so as to promote interpersonal relationship.
- Experts of a particular section should be made to train others so as to have a duplicate of those experts.

References:


industry in Nigeria. *Ife Psychologia, 14*(1), 15-25.


IMPACT OF CAPITAL MARKET GROWTH ON ECONOMIC GROWTH AND DEVELOPMENT IN NIGERIA

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Abstract
The capital market has been identified as institution that contributes to the economic growth and development of emerging and developed economies. It is a major driving force of economic growth and development of a nation. The main purpose of this paper is to evaluate the impact of growth in capital market on economic growth in Nigeria using regression analysis on annual data from 1981 to 2012. The results provide evidence to show that the capital market has significant positive impact on economic growth in Nigeria. The results also show, however, that growth in market capitalisation does not have significant impact on the economy in Nigeria. It is therefore recommended that capital market regulatory authorities should put in place polices that will enhance and sustain the market’s contribution to economic development.

Keywords: capital market, economic growth, regression analysis, Nigeria

JEL Classification Code: G10, O40

4 Corresponding author
1. Introduction

It is well established that economic growth and sustainable level of development remains the most significant macroeconomic objective of every well-meaning government, and these objectives have received the attention of scholars (Anyanwu, 1997; Levine and Zervos, 1998; Osuala, Okereke and Nwansi, 2013). Economic development is regarded as the major goal of national policy in any economy, while capital accumulation is also seen as a potent factor in the process of economic development it is regarded as the core process by which all other aspect of growth is made possible and feasible. Robinson (1952), for example, declares that “where enterprise leads finance follows”. Accordingly economic development creates demands for particular types of financial arrangement and financial system automatically responds to these demands. Levine and Zervos (1998) have been able to show that the level of financial intermediation is a good predictor of economic growth.

The capital market has been identified as institution that contributes to the economic growth and development of emerging and developed economies. It is a major driving force of economic growth and development of a nation. Anyanwu (1988) found that Nigeria stock market is positively and strongly correlated with long run economic development. Thus, the capital market impacts positively on the economy by providing financial resources through it’s intermediation process for the financing of long term projects. The projects could be promoted by government or private sector institutions. They are usually in such areas as infrastructures, agriculture, solid minerals, manufacturing, banking and other financial services and other real sector areas; hence without an efficient capital market the economy may be starved of the required long-term fund for sustainable growth.

A good number of studies have been conducted to examine the impact of capital market on economic growth and development both in developed and developing economies (see for example, Levine and Zervos, 1998; Caporale, Howells and Soliman, 2004; Alajekwu and Achugbu, 2012; Osuala, Okereke and Nwansi, 2013). Caporale, Howells and Soliman (2004), for example, provide the evidence that an
organized and managed stock market stimulate investment opportunities by recognizing and financing productive projects that lead to economic activity, mobilize domestic savings, allocate capital proficiency, help to diversify risks, and facilitate exchange of goods and services. Undoubtedly, stock markets are expected to increase economic growth by increasing the liquidity of financial assets, make global and domestic risk diversification possible, promote wiser investment decisions, and influence corporate governance that is, solving institutional problems by increasing shareholders’ value. Ekundayo (2002), on the other hand, argues that a nation requires a lot of local and foreign investment to attain sustainable economic growth and development. The capital market provides a means through which this is made possible. However, the paucity of long-term capital has posed the greatest predicament to economic development in most African countries including Nigeria. Capital provides the impetus for the effective and efficient combination of factors of production to ensure sustainable growth and development. Moreover, it is the effective utilization of productive resources accumulated over time that will determine the pace of growth of an economy.

Granted that so many studies have investigated the capital market-economic growth nexus, most of the studies were conducted for developed countries and other emerging economies. The few available studies in the case of Nigeria have been overtaken by events such as global financial crisis and outdated data. Again, capital market development and economic development are country specific objectives. The specific factors that affect capital market, for example, include: government policies and regulations, depth and breadth of the market, economic reforms in place, etc. There is need therefore for recent empirical evidence on the impact of capital market development on economic growth and development in Nigeria, especially now that the devastating effect of the global financial crisis has abated.

The objective of this paper therefore is to evaluate the impact of capital market growth on economic growth and development in Nigeria. This study in very important because the Nigerian capital market which witnessed a meltdown in last few years is gradually recovering, moreover, the eroded confidence
of shareholders and investors need to be restored. Thus it is expected that this study would complement the efforts of government and policy makers in complete revival of the Nigerian Capital Market and restoring the confidence of shareholders and other players in the market.

This paper will therefore contribute to existing literature on capital market growth on economic growth and development in Nigeria. The findings will also be useful to capital market regulatory authorities and aid in formulation of both economic and capital market development policies. The remainder of the paper is organised as follows. Section 2 presents the empirical literature. Section 3 embodies methodology and data. Section 4 presents the empirical results and discussions, and section 5 concludes the paper.

2. Review of Literature

2.1 Conceptual Framework

Economic development, according to Osamwonyi (2005), is an increase of the national income or total volume of production of goods and services of a country accompanied by improvements in the total standard of living of the people. It is comprehensively defined as a multi-dimensional process of a total upward structural shift of the social system in terms of a capacity and capability to produce, supply, distribute and consume goods and services required by a growing society with changing taste such that more efficient, higher and more equitable standard of living is attained and absolute poverty eliminated. It involves positive changes in the institutional, attitudinal, technological, economic and demographical elements of the society. These elements involve production, technological innovation, education, consumption, real per capita income, equitable distribution of gains of society, external trade, social, political and adaptive ideological orientation.

The capital market on the other hand is the market for longer-term funds and securities that tenor exceeds beyond one year. These include long-term loans, mortgage bonds preference stocks, ordinary shares, Federal Government bonds and industrial loans and debentures. The capital market can be defined as the section of the financial system that is responsible for channeling efficiently funds from the surplus to
the deficit economic units on a long-term basis (Onoh, 2002). According to Al-faki (2006), the capital market is a network of specialized financial institution, series of mechanism, process and infrastructure, that, in various ways facilitates the bringing together of suppliers and users of medium to long-term capital for investment in economic development project. This market is the source from which companies and industries obtain capital for expansion and modernization and also from which government borrows on a long-term basis for development purposes. Capital market as a network of institutions and individuals made up of regulators and operators who together bring suppliers and users of capital and facilitate the smooth operation of the market. These institutions that form the capital market network includes investment banks, stockbrokers, issuing houses, underwriters, venture capital companies, professional consultants, fund managers, development finance companies, collective investments firms, and insurance companies. The statutory regulator is the Securities and Exchange Commission while the self-regulatory agency is the stock exchange. In Nigeria, there is the Nigerian Stock Exchange and the Abuja Commodity Exchange.

A stock exchange a place where securities (bonds, stocks and derivatives) are traded and where one can raise long-term capital in large amounts (Onoh, 2002). It seeks the efficient allocation of available capital funds to the diverse uses in the economy and through its extreme sensitive pricing mechanism ensures the available capital resources are allocated to firms with competitive returns. It also is a barometer for the condition of the economy.

2.2 Empirical Literature

A good number of studies have been conducted to examine the impact of capital market on economic growth and development. Levine and Zervos (1996) examines whether there is a strong empirical association between stock market development and long-run economic growth. The study used pooled cross-country time series regression of forty-one countries from 1976 to 1993 to evaluate this association. They find a strong correlation between overall stock market development and long-run economic growth.
exist. This means that the result is consistent with a positive relationship between stock market development and economic growth. Similarly, Bensivenga, Burce, and Ross (1996) conclude that well developed stock market induces long run economic growth.

Hamid and Sunnt (1998) examined the relationship between stock market development and economic growth for 21 emerging markets over 21 years, using a dynamic panel method. Their results indicate a positive relationship between several indicators of stock markets performance and economic growth both directly and indirectly by boosting private investment behaviour.

Azarmi, Lazar and Jeyapaul (2005) examine the empirical association between stock market development and economic growth for a period of ten years around the Indian market liberalization event (1981 – 2001). The study revealed among others that the Indian stock market development is not associated with economic growth for the study period 1981. On their part Ben and Ghanzouani (2007) reported that financial system development could have adverse effect on economic growth in a sample of 11 countries they studied, and therefore advocated for a vibrant financial sector.

Many authors have equally examined the capital market-economic development nexus in Nigeria. Nyong (1997) developed an aggregate index of capital market development and used it to determine its relationship with long run economic growth in Nigeria. The study employed a time series data from 1970 to 1994. Four measures of capital market development ratio of market capitalization to GDP (in %), ratio of total value of transaction on the main stock exchange to GDP (in %), the value of equities transactions relative to GDP and listing were used. The four measures were combined into one overall composite index of capital market development using principal component analysis. The financial market depth was included as control. It was found that the capital market development is negative and significantly correlated with the long growth in Nigeria.
Ewah, Esang and Bassey (2009) appraised the impact of capital market efficiency on economic growth in Nigeria, using time series data on capitalization, money supply, interest rate, total transaction and government development stock that ranges between 1961 to 2004. The result of the study shows that the capital market in Nigeria has the potential of growth inducing, but it has not contributed meaningfully to the economic growth of Nigeria. The study attributed the findings to the low market capitalization, low absorptive capitalization, illiquidity, misappropriation of funds among others. The study believed and suggested capital market remains one of the mainstreams in every economy that has the power to influence economic growth, hence it advised the organized private sector to invest in the capital market. 

Abu (2009) examined whether stock market development raises economic growth in Nigeria, by employing the error correction approach. The econometric results indicated that stock market development (Market Capitalization GDP ratio) increases economic growth. He however recommended the removal of impediments to stock market development which include tax, legal and regulatory barriers, development of the nation’s infrastructure to create enabling environment where business can strive, employment policies that will increase the productivity and efficiency of firms as well as encouraging the Nigerian Securities and Exchange Commission to facilitate the growth of the market, restore the confidence of stock market participants and safeguard the interest of shareholders by checking sharp practices of market operators. Ezeoha, Ogamba and Onyiukel (2009) investigated the nature of the relationship that exist between stock market development and the level of investment (domestic private investment and foreign private investment) flow in Nigeria. The authors discovered that stock market development promotes domestic private investment flows thus suggesting the enhancement of the economy’s production capacity as well as promotion of the growth of national output. However the result shows that capital market development has not been able to encourage the flow of foreign private investment in Nigeria. Some authors focus on the casual relationship between capital market development and economic growth of example.

Oke and Ojo (2012) found out that market capitalization and new issues are positively related to GDP
implying that market capitalization and increase in stock aids economic development. They opined that increase in market capitalization as a result of primary capital market transactions is needed for economic development rather than improved liquidity in the secondary market. Alajekwu and Achugbu (2012) investigate the role of stock market development on economic growth of Nigeria using Ordinary Least Square (OLS) techniques on 15-year time series data from 1994 - 2008. Their results show that market capitalization and value traded ratios have a very weak negative correlation with economic growth while turnover ratio has a very strong positive correlation with economic growth. Also, stock market capitalization has a strong positive correlation with stock turnover ratio. This result implies that liquidity has propensity to spur economic growth in Nigeria and that market capitalization influences market liquidity. They recommended that government should make policies that boost the interest of domestic investors in Nigeria as this might spur investors’ interest and boost stock market activity.

Osuala, Okereke and Nwansi (2013) examine the existence of causality relationship between stock market performance and economic growth in Nigeria using the General-to-specific Autoregressive Distributed Lag (ARDL) / Bound testing approach on time series data covering the period 1981 – 2011. The study finds the empirical evidence of long-run co-integration between economic growth and stock market performance. However, with regard to causal relationship between GDP and Stock market performance indicators, a uni-directional causality was established from only TNDR to GDP on the short-run. On the long-run, there was no causal relationship between economic growth and stock market. The study therefore recommends that the regulatory authorities should initiate policies that would rekindle the dwindling interest and confidence of both domestic and foreign investors in the market, and also be more proactive in their surveillance role in order to checkmate negative practices which undermine market integrity.

3. Methodology and Description of Data

3.1 Methodology

To investigate impact of capital market growth on economic growth and development in Nigeria, we
employ descriptive analysis and regression analysis. Descriptive analysis is the presentation of summary of the important statistics in a data set. Our descriptive statistics involve plotting of time series graph and computation of mean, standard deviation, skewness, kurtosis, and Jarque-Bera statistic for the level and growth series of capital market and economic development proxies. While the mean presents information on the average of the capital market and economic development series, the standard deviation shows the level of variation of the series from their average. The skewness and the kurtosis provide insight into their distributional pattern.

The regression analysis, on the other hand, was conducted using ordinary least square (OLS) method. The OLS enables the measure of the impact of independent variable(s) (X) on the dependent variable (Y). It is specified as follows:

$$\text{GDP}_t = \lambda_0 + \lambda_1 \text{MC}_t + \lambda_2 \text{INF}_t + \varepsilon_t$$  \hspace{1cm} (1)

The a priori expectation of the slope coefficient is: $\lambda_1 > 0$.

Where $\text{GDP}$ is the dependent variable and is the observations of yearly nominal gross domestic products, $\text{MC}_t$ denotes the yearly observations of the Nigerian Stock Exchange capitalisation, $\lambda_1$ is the coefficient and its effect on nominal GDP and $\varepsilon_t$ is the stochastic error term at time $t$.

### 3.2 Description of Data

The data for this study are yearly series of nominal $\text{GDP}$ and yearly series of NSE Market Capitalisation. While the $\text{GDP}$ proxy’s economic development, NSE capitalisation proxy’s capital market development, and Inflation rate serves as a control variable. The nominal $\text{GDP}$ and inflation rates series were obtained from Central Bank of Nigeria (CBN) statistical bulletin for various years and $\text{MC}$ series were obtained from the Nigerian Stock Exchange. The period under consideration for the variables ranges from 1981 to 2012.
4. Empirical Results and Discussions

4.1 Graphic Presentation

Figure 1 displays a time series plot of the growth in GDP and growth in NSE market capitalisation. Notice from this figure that the growth GDP maintain visible upward and downward spikes, with 1986 and 1998 having the least growth rates. The market capitalisation, on the other hand, achieved the highest growth rate in 1994 and least in 1995. Notice also the increase in market capitalisation growth rate from 2002 till its fall in the first quarter of 2008 as a result of the global financial crisis.

![Figure 1: Relation between NSE Market Capitalisation and GDP](image)

4.2 Descriptive Statistics

Descriptive statistics of the GDP and Market Capitalisation series are presented in Table 1 below. From table 1, notice that the average GDP and average MC are 8853167.3 and 2632475.6 respectively for the sample period. However, the sample mean for growth in GDP and MC are 1.3% and 2.2% respectively. The standard deviation is 1.1% for growth in GDP and 5% for growth in Market Capitalisation. These show that market capitalisation has both higher growth rate and dispersion. The skewness and kurtosis coefficients under normality assumption are 0 and 3 respectively. But the skewness coefficients for growth in GDP and growth in Market Capitalisation are 1.28 and 2.55 respectively, and the kurtosis coefficients for growth in GDP and growth in Market Capitalisation are 2.17 and 13.8 respectively. The p-values show that the coefficient of the skewness for growth in GDP and growth in Market Capitalisation are not zero. The excess kurtosis of the growth in GDP is nonzero, and is not significant at
95% confidence, suggesting that series are leptokurtic. In the same vein, the Jarque-Bera statistics for both series suggest that may not be normally distributed at 5% significance level.

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>8853167.3</td>
<td>11841430.8</td>
<td>1.500</td>
<td>1.263*</td>
<td>14.138</td>
<td>32</td>
</tr>
<tr>
<td>MC</td>
<td>2632475.6</td>
<td>4522908.1</td>
<td>1.677</td>
<td>1.389*</td>
<td>17.577</td>
<td>32</td>
</tr>
<tr>
<td>Panel B: First Differenced Series</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GGDP</td>
<td>0.013</td>
<td>0.011</td>
<td>1.278</td>
<td>2.172*</td>
<td>14.544</td>
<td>31</td>
</tr>
<tr>
<td>GMC</td>
<td>0.022</td>
<td>0.050</td>
<td>2.555</td>
<td>13.759</td>
<td>278.29</td>
<td>31</td>
</tr>
</tbody>
</table>

Note: GDP is the nominal GDP. MC is the market capitalisation. GGDP is the growth in nominal GDP and GMC is the growth in market capitalisation. * indicates not significant.

4.3 Regression Results

The summary of the results for the OLS model specified in equation (1) are presented in Table 2 below. Notice from Table 2 that Nigerian Stock Exchange Market Capitalisation has positive and significant impact on economic growth; the coefficient of market capitalisation is 0.711. The t-statistic and p-value stood at 26.17 and 0.000 respectively. This implies that the NSE market capitalisation contributes positively to economic development in Nigeria. The value of the coefficient of determination ($R^2$) stood at 0.960. This indicates that 96% of the total variation in GDP is accounted for by the NSE market capitalisation. The Durbin-Watson coefficient (1.228) suggests that there is serial correlation in the series.

Panel B of Table 2 displays the regression results of the growth series of GDP and Market Capitalisation. We can see from Table 2 that growth in Market Capitalisation has negative but not statistically significant impact on growth in economic growth; the coefficient of the growth in market capitalisation is -0.016. The t-statistic and p-value are -0.37 and 0.708 respectively. These imply that growth in the NSE market capitalisation does not contribute to economic development in Nigeria. The negative impact of growth in Market Capitalisation on the economy may not be unconnected with the crash in the stock market as a result of the global financial crisis, which started in the United States of America in 2007. This crisis results in over 70% erosion of the NSE capitalisation. Both institutional and individual investors lost large amounts of their investment in the NSE. It was during th
period that about three banks were nationalized in Nigeria. It is therefore not surprising that growth in the NSE capitalisation did not impact positively on economic development in Nigeria.

### Table 2: Results of Regression Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-value</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level Series</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.815</td>
<td>11.973</td>
<td>0.000</td>
</tr>
<tr>
<td>MC</td>
<td>0.711</td>
<td>26.175</td>
<td>0.000</td>
</tr>
<tr>
<td>INF</td>
<td>0.023</td>
<td>0.222</td>
<td>0.825</td>
</tr>
<tr>
<td>$R^2 = 0.960$, $F(2, 29) = 356.3 , [0.000]$, DW = 1.228</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Growth Series</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.0139</td>
<td>5.895</td>
<td>0.000</td>
</tr>
<tr>
<td>GMC</td>
<td>-0.016</td>
<td>-0.378</td>
<td>0.708</td>
</tr>
<tr>
<td>GINF</td>
<td>0.009</td>
<td>1.251</td>
<td>0.220</td>
</tr>
<tr>
<td>$R^2 = 0.609$, $F(2, 28) = 0.845 , [0.439]$, DW = 1.504</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5. Conclusions

The capital market has been identified as institution that contributes to the economic growth and development of emerging and developed economies. It is a major driving force of economic growth and development of a nation. Hence, this paper examined the impact of growth in capital market on economic growth in Nigeria using regression analysis. The data for analysis were obtained from the Central Bank of Nigeria (CBN) statistical database and covers the period 1985 to 2013. The estimates from the descriptive analysis show that both the GDP and market capitalisation series are not normally distributed at 5% significance level. The results from the regression model provide evidence to show that the capital market has significant positive impact on economic growth in Nigeria. The results further show, however, that growth in market capitalisation does not have significant impact on the economy in Nigeria. We therefore recommended that capital market regulatory authorities should put in place polices that will enhance and sustain the market’s contribution to economic development.

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FIRMS’ SPECIFIC CHARACTERISTICS AND STOCK MARKET RETURNS (EVIDENCE FROM LISTED FOOD AND BEVERAGES FIRMS IN NIGERIA)

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Abstract
Because of the mix of opinion in the literature, the mix of empirical findings, and the limited empirical works on the relationship between firms’ specific characteristics and Stock Market Returns particularly with reference to listed food and beverages firms in Nigeria, it is not out of place to conduct further research on this area to ascertain position. The study investigated the impact of certain firms’ attributes namely: Market Capitalization, Debt-to-Equity Financing and Earnings per Share on Stock Market Returns of listed food and beverages firms in Nigeria for the period 2007-2013. The population comprises all the twenty-one (21) food and beverages firms listed on the Nigerian Stock Exchange (NSE) December, 2013. Out of which nine (9) firms constitute the sample of the study. The study adopted both correlation and ex-post facto research design. The data for the study was purely from secondary sources obtained from the annual reports of the sampled firms as well as NSE fact book. Data was analyzed using several options of multiple panel data regression. But the most robust of all is OLS regression as suggested by ‘Breusch and Pagan Lagrangian Multiplier Test for Random Effect’. The findings revealed that Market Capitalization has a significant negative impact on Stock Market Returns of listed food and beverages firms in Nigeria; while the impact of Debt-to-Equity Financing and Earnings per Share on Stock Market Returns are found to be positive and statistically significant. Based on these findings the study recommend as follows: that government and policy maker (Security and Exchange Commission) should
design and implement more stringent rule where firms will be compelled and monitored on providing high quality financial reporting, so as to be reporting earnings that reflect their actual performance. This would prevent investors from falling on to the trap of earnings manipulation (as it happened to shareholders of Cadbury Nigeria plc.). In addition, prospective investors should not only focus on huge returns for investing in smaller capitalized or high levered firms; rather, further analysis need to be carried out to tradeoff between risk and returns.

Key Words: Market Capitalization, Debt-to-Equity Financing, Earnings per Share, Stock Market Returns and Stock Market

1.1 Introduction

Stock return is very important as it is the main objective of investment in ordinary shares. Investor, both existing and potential ones regard return as the fundamental reason for investing in a particular firm. Stock return can be in form of capital appreciation/depreciation (as obtained in the Nigerian stock exchange) plus dividend received if any. Stock prices are important metrics of measuring stock market returns. Therefore, the value attached to them matters a lot to both existing and prospective investors in the stock market. There are several factors in stock prices determination in the stock market. This factors ranges from accounting and non-accounting information.

Stock Market Returns are the returns or gain that the investors generate out of the stock market. The most common way of generating stock market return is through trading in the secondary market. In the secondary market an investor could earn stock market return by buying a stock at lower price and selling it at a higher price. Book value of equity constitutes the accounting based value for owners and be useful in judging on the true value of equity (Hallefors, 2013). Capital market serves as a place or arrangement where investors and investees interact. The share at which is being sold is determine by the corporate firm characteristics which usually affect the amount of capital a company can raise from the stock market. Stock market provides a link between firms need to raise fund for business continuity or expansion and those investors wish to invest their excess resources. Therefore, it is a point for buying and selling of shares, and share prices are determine by demand and supply, which usually influence by firm specific factors and/or macroeconomic variables (Adedoyin, 2011).

Accounting fundamentals (firm specific ratios) serve as a predictor of stock market returns since it gives highlight to the likely future returns. Examples of accounting fundamentals are leverage ratio, profitability, market capitalization. According to Aldin, Dehnari, and Hajighasemi (2012), investors aim at maximizing their yield and they are very eager to predict the firm stock returns in which they invest. They expect to receive dividend and/or capital gain from investing in the equity market. Stock Market Returns are subject to market risks. They are not homogeneous and may change from investor-to-investor depending on the amount of risk one is prepared to take and the quality of his Stock market analysis. This implies that the more investment one has, the higher the amount of risk one assumed and hence the higher the expected stock market returns.

Because of the importance attached to the ‘tradeoff between risk and returns’, investors are interested in
making judgment about expected returns from investing in stock, and several researches were conducted that identified models and firm specific ratio that can influence market stock returns. The traditional model for predicting market return- CAPM (Capital Asset Pricing Model) developed by Sharpe (1964) and Linter (1965) and Black (1972) assumes that in an efficient market, securities are correctly priced and returns are ascertained mainly by the amount of risk one assumes. This model cannot be sufficient in predicting stock market returns alone and has its own defect (Uwubanmwen & Obayagbona, 2012). Recent studies show that there are other variables that outperform CAPM (represented by company’s systematic risk or beta) in determining or predicting stock market returns with great precision. Basu (1997) demonstrated that the differences in Beta cannot justify and explain the difference in stock returns. Another criticisms of CAPM was found in the work of Fama and French (1992) who sees that the positive relationship between beta established by CAPM and average stock returns was a product of the negative association between firm size and beta. This shows that firm size has inverse relationship with the beta. More clearly the larger the firm the lower the risk. They further argued that when this association was taken into cognizance, the relationship between beta and stock returns will definitely disappeared. Drew (2003) also stated that beta alone is not sufficient in explaining stock return and that firm size and market to book value ratio are significant and effective in explaining average stock returns. Al-Tamimi (2007) argued that the cause of increase or decrease in demand for a particular stock is determined by the firms’ fundamentals, external factors and market behavior. Therefore, these variables that are capable of sending signal to investors on the future expected return varies from one firms to another and empirical evidence shows that apart from company’s systematic risk as measured in CAPM, there are numerous firm’s unique set of variables that better explain variation in stock returns. This firm specific factors ranges from size effect (Market capitalization-MC), growth effect (Market-to-book-value of equity, value effect (Earnings per share- EPS) and risk effect (Debt-to-equity ratio-D/E). Therefore, in academic researches, stock returns have been found to be associated with MC, D/E and EPS. In contemporary literature, firm size has been typically measured in terms of MC. Banz (1981) and Basu (1983) argued that small size firms are generally riskier than large size firms and hence deserves higher returns. This shows that negative relationship is observed between size and returns, other things being equal, market value of equity will be pushed down in order to provide higher expected returns. Small firms are mostly ignored by potential investors, they exhibit less liquidity and hence their beta are mostly underestimated and do not have diversified operation. Thus, small firm stock should significantly outperform stock prices of big firms. Berk (1996) demonstrates that while expected negative relationship between MC and does persist for US data, similar hypothetical is missing when such non-market based measures of company size as total assets, fixed assets and number of employees are used. On the contrary, it is argued that larger firms provide higher stock market returns with less risky for investment than small size firm in term of market stock capitalization. D/E affects the overall returns of firms. Financial economists are of the view that high levered firm has a higher earning than a low levered firm because of the low cost of capital (Sundaresan & Fan, 2000). But on the other hand, (Wajid, Arab, Madiha, Waseem & Ahmad, 2013) opined that high levered firms are regarded as more risky for investment because, they have a high chance of falling onto the trap of
bankruptcy, as such, potential investors do avoid investing in such kind of firms. Consequently the demand for its share will fall and hence affect the stock price as well as stock returns. Hence negative effect will be expected. Prior researches suggest that firm that change their leverage level experience changes in stock prices more often. Increase in debt decreases stock prices and hence stock returns. Although, many researches have argued that capital structure were positively related to debt to equity ratio (Bhandari & Chand, 1988). That is theoretically, when a firm total debt supersede its total equity the shareholders will demand a high returns on its stock due to high risk of bankruptcy. Then one will expect leverage to have a positive effect on stock market returns.,

EPS is useful for judgment on stocks. It is the profit generated from every naira price earned by a firm. Based on the priori expectation, EPS is expected to have positive relationship with stock return. That is the higher the EPS the higher is going to be the expected market returns. Both existing and potential investors concern about the firm performance, so they pay more attention to firm’s profitability that usually moves a firm’s share price upward and consequently affect stock return. Prior researches as described by (Hallefors, 2013) cast some doubt as to whether accounting convention like verifiability and prudent measurement of asset and liabilities produced earnings measurement that is all related to stock market return. Although many empirical researches of the relationship between current earnings and stock returns have been conducted there has not been consensus on a theoretical benchmark level of returns relative to current earnings. EPS is expected to have positive relationship with stock market returns. Previous researches shows that EPS usually have positive impact on stock market returns.

Up to date there is no consensus as to which single or combination of variables best explain stock market returns. This allow for the interested researchers to find out which research setting in term of country, firms and environment are best proxies for their situation that determine stock returns. Some characteristics have been shown to have a strong ability in forecasting stock returns. This is an indication that degree of explanatory power of variable(s) on stock market returns depend on the country of stock, period of study and sector of the economy. For example, Bhandari (1998) pointed out that the leverage ratio compared to beta is much stronger variable in explaining variation of stock market return. While Azam (2011) stated that previous studies confirmed that only EPS and dividends as firm specific variables affect stock returns. Fama and French (1992) showed that two variables of firm characteristics-firm size and B/M ratios pooled together can take the place of the market beta in explaining the cross sectional variation in stock returns.

Some of the available literature found in Nigeria have some shortcoming here and there and left some gaps to be filled. For example, Osisanwo and Atanda (2012) focused on macroeconomics variables (not firm specific ratio) that affect stock prices as well as stock market returns. The variables he used include: interest rate, previous stock returns levels, money supply and exchange rate. Uwubamwen & Obayagbona (2012) and Adedoyin (2011) used total assets as proxy for firm size, while in the contemporary literature firm size has been typically measured in terms of market capitalization of stock (i.e. in a study that involve the determination of stock market returns and or share price). In Okoro and Stephen (2014), the proxies used are only performance indicators. Market capitalization and capital structure were not captured in the model of the study. Furthermore, these studies drawn their sample from
all the listed firms on the NSE, the study did not concentrate on a particular sector and the findings appear too general and not specific. There is a need to consider industry differences and common characteristics attributed to each sector.

Because of the mix of opinion in the literature, the mix of empirical findings, and the limited empirical work on the relationship between firm characteristics and stock market returns particularly with reference to listed food and beverages firms in Nigeria, it is not out of place to conduct further research on this to ascertain position.

Listed food and beverages firms remain the largest subsector in the Nigerian manufacturing sector in term of capital based and share price quotation. Although it is being operated below its potentials, but it has performed better than a number of other subsectors as it’s witnessed expansion in investment due to increase in population. It is among the most vibrant sector in the Nigerian stock exchange market as the market capitalization of beverages (distillers), beverages (non-alcoholic), food product and food product diversified hit N1.101 trillion, N29.768 billion, N244.493 billion and N388.928 billion respectively in 2012. Despite the just recent global economic meltdown that brought about crash in the Nigerian stock market especially in 2009 yet some firms’ share prices were not affected adversely compared to other sectors. For example, the share prices of Nestle plc as quoted in the NSE was at N239.5, N368.55, N445.66, N700 and N840 in 2009, 2010 2011, 2012 and 2013 financial year end respectively. While that of Guinness plc was at N129, N158.51, N245, N226 and N251.07 in that order. This is an indication that investors, both individuals and institutions are diverting their investment to that sector, because they want to maximize market returns. The question still remain whether there is any relationship between Market Capitalization, Debt-to-Equity financing, Earnings per Share and the Stock Market Returns of listed food and beverages firms in Nigeria?

The aim of the paper is to examine the cumulative effect of Market Capitalization of shares, Debt-to-Equity financing and Earnings per Share on the Stock Market Returns of listed food and beverages firms in Nigeria. While the specific objective is to:

i. Investigate whether market capitalization of shares has significant effect on stock market returns of listed food and beverages firms in Nigeria.

ii. Determine the impact of debt-to-equity financing on stock market returns of listed food and beverages firms in Nigeria.

iii. Ascertain the influence of earnings per share on stock market returns of listed food and beverages firms in Nigeria.

As such, the study hypothesized in null form as follows:

$H_{01}$: Market capitalization has no significant effect on stock market returns of listed food and beverages firms in Nigeria.

$H_{02}$: Debt-to-equity financing has no significant impact on stock market returns of listed food and beverages firms in Nigeria.

$H_{03}$: Earnings per share has no significant impact on stock market returns of listed food and beverages firms in Nigeria.
The finding of the study will be helpful to investors in knowing the variable or combination of variables that will be better in predicting stock price and consequently, valuation of stock market returns of listed food and beverages firms in Nigeria. The study will add to the body of existing literature and basis of validating theory. The policy implication of the findings will be of great contribution to regulatory agencies like Security and Exchange Commission as well as Corporate Affairs Commission. The remaining part of the paper are organized as follows: Section 2: literature review and theoretical framework; section 3: describes the methodology used and model specification; section 4: examines the results of the statistical analysis, and section 5: is conclusion and recommendation

2.1 Literature Review and Theoretical Framework

2.1.1 Market Capitalization (size) and stock market returns

Small size may suffer from information asymmetry. It is more risky for investment than larger firms as such investors demand more returns on their stock (Gallizo & Salvador, 2006). This is clearer in the work of Banz (1981) who stated that smaller firms appear to have higher returns than larger firms. Hence, firm size is expected to have negative impact on stock returns. On the contrary, it is argued that larger firms provide higher stock market returns with less risky for investment than small size firm in term of market stock capitalization.

Ziemba (1991) and Levis (1988) found that small capitalization outperform large stock capitalization. Shapiro and Lakonishok (1984) found insignificant relationship between beta and stock returns, but found the existence of significant relationship between firm size and stock returns. In his study, Pandy (2001) found a significant positive relationship between market capitalization and stock returns of listed firms in the Malaysian stock market.

According to Tahir, Sabir, Alam & Ismail (2013) there are numerous variables that explain stock returns, but the most basic and easiest measure is the value of both firms and its stock, that is by looking at its market value- market capitalization. Studied conducted by (Wakil, 2013) compares the value relevance of market capitalization (MC), total asset and market value of total asset as proxy for firm size in CAPM. Surprisingly firm size is almost always included in CAPM and MC of a firms’ common stock is the best proxy for explaining stock variation. In contemporary literature, company size has been typically measured in terms of market capitalization.

Tahir, Sabir, Alam & Ismail (2013) empirically investigate the impact of some firm characteristics (which they described as being unique on stock returns) of listed non-financial firms of Pakistani for the period 2002 to 2012. Four proxies of firm characteristics were used: market capitalization (size effect), sales growth, EPS and book-to-market value of equity. The secondary data of 307 firms was analyzed using multiple regression. The results of the study that MC has a significant positive impact while sales growth has no significant effect on stock returns. The study found a support for the impact of firm size on Pakistani stock returns.

The period of the study is very small. Leverage was also omitted in the model despite its strong contribution in predicting stock returns as described in the literature.

Lukacs (2002) examines the relationship between market capitalization of stock and the distribution of
stock returns. Using a sample of 21 stock listed on the Budapest stock exchange, the results are evaluated by using both charts and rank correlation. A significant relationship was found between MC and the distribution of stock. The study only use rank correlation as a technique of analysis.

Tudor (2010) studied the explanatory power on future stock returns of market beta, financial leverage, book-to-market equity, size, earnings to price ratio, return on assets and return on investment covering the period 2002-2008. Two way fixed effect multiple regression was used. The negative relationship was observed between size (market capitalization) and stock returns. They stressed that the negative effect is persistent and remain the highest when variables are dropped from the regression even in the univariate setting. He also noticed that size has the most significant effect in capturing variation in stock returns over the whole period.

Uwubanmwen & Obayagbona (2012) studied the effect of company fundamentals and returns on equity in the Nigeria stock market. Using a sample of eight firms with 11 years observation. Proxies for company’s fundamentals used includes: book-market value of equity, firm size, leverage and price earnings ratio. The study found that firm size has no significant effect on stock market returns. The study uses traditional measure of firm size i.e. natural log of total asset while current studies show that market capitalization is the best proxy for studying the impact of firm size on stock returns.

Adedoyin (2011) analysis the effect of firm characteristics has in determining share listed on the NSE for the period 2004-2009 by using a sample of 72 firms. OLS method, fixed effect and random effect estimation technique were used for the analysis. The results indicate that the size of firms has the most significant effect on price determination in the two models. The criticisms of the study is that they adopt total asset as proxy for firm size in determining share prices.

Rahmani, Sheri and Tajvidi (2006) examine the relationship between accounting and market variables and the stock returns on the basis of pooled cross-sectional data of the period 1997-2003 by applying both multivariable and univariable models. The result proved that size (MC) has significant positive impact on stock market return. In a single variable model, hypotheses 2-7 shows that the relationship between size and stock returns proved to be more stable compared to other variables.

Kumar and Sehgal (2004) suggest that using both market and non-market based measure of company size portray a strong effect in the Indian stock market

2.1.2 Debt-to-Equity ratio and Stock Returns
Leverage as a proxy of financial risk is expected to be related with expected stock returns. The financial risk is mostly reflected in firm financial leverage. Tradeoff theory posit that large firms can easily penetrate capital market to long term debt since they have lower bankruptcy cost. Large firms use debt financing option to take advantage of tax shield. Thus, positive relationship is expected. On the contrary view, Wajid et al. (2013) opined that high levered firms are regarded as more risky for investment because, they have a high chance of falling onto the trap of bankruptcy, as such, potential investors do avoid investing in such kind of firms. Consequently the demand for its share will fall and hence affect the stock price as well as stock returns. Hence negative effect will be expected. Bhandari (1988) in his study found a positive relationship between financial leverage and stock returns. While Welch and Ivo (2004)
conducted a research on relationship between capital structure and stock returns by examining the US listed firms for the period 1960-2000, and found that stock returns was negatively correlated to debt-equity ratio when firms were inactive and did not reschedule their debt ratios in period of stock prices increase or decrease.

Khan, Naz, Khan, Khan and Ahmad (2013) studied the impact of capital structure and financial performance on stock returns of Pakistan textile industry. Using OLS method, the result revealed that D/E ratio and EPS affect stock returns positively. They believed that the positive trend predicted is because majority of the firms are family-owned and the directors run the in the interest of majority shareholders instead of stakeholders.

Chambers, Sezgin and karaaslan (2013) investigate the effect of capital structure and the beta coefficient on stock returns of listed manufacturing industry. Where the data of 65 industrial firms in the Istanbul stock exchange are analyzed. The study used three periods: the whole period from 1994 to 2010, the sub-period from 1994 to 2002 and the sub-period from 2003 to 2010. Panel regression analysis is used in which total debt to market value (TD/MV) and beta ratio are found to have statistical significant effect on both nominal and real stock returns in all the three periods. The TD/MV ratio is also found to be statistically significant but with a negative effect on both nominal and real stock returns in the 1994 to 2002 sub-period but in the 1994 to 2010 period only real stock return that is statistically significant. But, Tudor (2006), in his study, financial leverage measured as total debt to total equity was found to be positively impacting stock returns. Though, the statistical significance is the second highest after MC.

Bhandari (1998) in his study of the relationship between stock returns and the expected leverage ratio during the period 1949 to 1979. Significant positive association between leverage and stock returns of the firms was observed and the relationship is higher in manufacturing firms and in January. He stressed that the leverage ratio is a much stronger variable in explaining stock returns compared to beta.

Yang, Lee, Gu & Lee (2010) examine the relationship between capital structure and stock returns for the period 2002-2005 in the Taiwan stock exchange. The essence is to determine the way the two affect each other. The result of the analysis shows that leverage ratio significantly and positively affect stock returns. On the other way round, stock returns affect the leverage ratio negatively. He concluded by saying that the variables affect each other only that the direction of the relationship varied.

Ahmad, Fida and Zakaria (2013) examine the co-determinants of capital structure and stock returns for the period 2006-2010 by employing a panel dataset for 100 non-financial firms listed on the Kingdom of Saudi Arabia stock exchange. Generalized Method of Moments was employed to analyze the data. The statistical result of the study shows that stock returns and leverage affect each other, but, the effect of leverage (positive effect) on stock returns is greater than the effect of stock returns (negative effect) on leverage.

Uwubanmwen & Obayagbona (2012) studied the effect of company fundamentals and returns on equity in the Nigeria stock market by using a sample of eight firms with 11 years observation. That apart from Book-to-market value of equity that passes significant test at 1% level, only financial leverage is able to pass the significant test at 10% level with positive impact on stock market returns. PER was found to have insignificant relationship with stock returns.

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Rahmani, Sheri and Tajvidi (2006) examine the relationship between accounting and market variables and the stock returns on the basis of pooled cross-sectional data of the period 1997-2003 by applying both multivariable and univariable models. The coefficient of debt to equity under multivariable model was significant in one year only. But the model was not significant for the year 2000 and 2001. In the single variable model D/E ratio was found to be statistically insignificant.

2.1.3 Earnings per Share and Stock Market Returns
The empirical research on the association between accounting information and stock market returns was started by Ball and Brown (1968) and Beaver (1968) and they concluded that accounting earnings contain information for stock market participants. Since firm with higher profitability provides more returns on their stock, then, higher EPS should have a positive effect on stock returns.
Tahir, Sabir, Alam & Ismail (2013) empirically investigate the impact of some firm characteristics (which they described as being unique on stock returns) of listed non-financial firms of Pakistani for the period 2002 to 2012. The study also acknowledge a value effect on the Pakistani stock market as EPS was found to have positive impact on stock market returns.
Okoro and Stephen (2014) conducted a study to investigate the factors that determine stock price movement in Nigeria for the period 2001-2011. Data were collected from the financial statement of 99 listed firms in the NSE. Ordinary Least Square was used to analyze the data. Three proxies were used: EPS BVPS and dividend cover. The result revealed that EPS has a positive impact on stock prices. The explained that the magnitude of changes is that increase in the EPS by 1 unit will lead to an increase in the price per share by 0.25 units. They stressed that EPS has the strongest explanatory power in explaining stock prices movement.
The study uses OLS method as a means of analyzing panel data. Sometimes OLS tend to be biased as it does not recognize time factor, and individual firm invariant characteristics. It does not recognize panel effect. The proxies used are only performance indicators while there other indicators that need to be tested e.g. firm size, market capitalization, capital structure.
Chambers, Sezgin and karaaslan (2013) investigate the effect of capital structure and the beta coefficient on stock returns of listed manufacturing industry. Among the control variables used in the study only the EPS was found to have significant positive effect on stock return in the 1994-2002 sub-period. Similarly Ahmad et al. (2013) found that profitability affect stock returns of listed firms in the KSE positively. Altamimi (2007) discovered that EPS had the most influencing factor over market model.

3.1 Methodology and Model Specification
The study adopts both correlational and ex-post facto research design. This is because the study seeks to explore the relationship between firms’ specific attributes and stock market returns by following quantitative approach. Historical data is used for the analysis. The population comprises all the twenty-one (21) food and beverages firms listed on the NSE as at 31st December, 2013. Out of which nine (9) firms constitute the sample of the study. We made all effort to see that we drew adequate sample size, considering the size of the population (21) as well as the degree of precision required. We arrived at the sample owing to the fact they have complete information required for the analysis. The sample size
covered 43% of the population. The data for the study was purely from secondary sources obtained from the annual report of the sampled firms as well as NSE fact book. The period of the study covers seven years (2007-2013).

The study employed the use of Ordinary Least Square (OLS) regression, Fixed Effect (FE) regression and Random Effect (RE) regression, and analyzed the result using Stata 10.1 computer statistical software. Multiple regression technique was adopted using panel data methodology. As such, the empirical results of the study are based on the following regression model:

\[ \text{SMR}_{it} = \beta_0 + \beta_1 \text{MC}_{it} + \beta_2 \text{DE}_{it} + \beta_3 \text{EPS}_{it} + \mu_{it} \]

Where:

- \( \text{SMR}_{it} \): represent stock market returns of the firm \( i \) in time \( t \).
- \( \text{MC}_{it} \): represent market capitalization of the firm \( i \) in time \( t \).
- \( \text{DE}_{it} \): represent debt-to-equity ratio of the firm \( i \) in time \( t \).
- \( \text{EPS}_{it} \): represent earnings per share of the firm \( i \) in time \( t \).
- \( \beta_0 \): represent individual effect taken to be constant over time and specific to the individual cross-sectional unit.
- \( \beta_1-\beta_3 \): represent the coefficient of the explanatory variables.
- \( \mu_{it} \): represent error term of random disturbance.

**Table 3.1: Variable Measurements**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMR</td>
<td>( \frac{P1 - P0}{P0} \times 100 ). Where: ( P1 ) represent price of the stock in current year as quoted at the end of the financial year. ( P0 ) represent price of the stock in last financial year end.</td>
</tr>
<tr>
<td>MC</td>
<td>Number of the ordinary shares of the firm at the end of the financial year multiplies by the last price of each stock at the end of the same financial year</td>
</tr>
<tr>
<td>DE</td>
<td>Ratio of the total long term debt to total shareholders fund (equity)</td>
</tr>
<tr>
<td>EPS</td>
<td>Net income after tax available to shareholders divide by number of outstanding ordinary shares.</td>
</tr>
</tbody>
</table>

Source: The Authors, 2015

Note that according to Warfield and Wild (1992), previous researches suggest that quarterly and semi-annual accounting earnings have little explanatory power for returns. As such, annual data will be more appropriate.

**4.1 Results and Discussion of Findings**

Table 4.1 presents descriptive statistics of the variables of the study. The mean, standard deviation, minimum, and maximum have been used to describe the data.

**Table 4.1: Descriptive Statistics**

| Variables | Obs | Mean | Std. Dev. | Min. | Max. |
From the table above, SMR (stock market returns) has a mean of 38.3265. The range of the SMR is from the minimum of -84.8936 to a maximum of 185.9155. This shows that on average, the stock of the sample firms was able to yield market returns of 38% on the ordinary shares invested by shareholders. The minimum value is an indication that some shareholders lost stock market return to the extent of 85% during the period. On the other hand, some investors gain up to 186% as market returns. The standard deviation of 64.4432 signifies greater volatility in stock market returns and the data deviate from the mean value from both side by 64% implying that the data is widely dispersed from the mean. This also proved that stock market returns varied from one company to another. This may be as a result of some factors attributed to firms. Furthermore, the result shows MC (measured by the natural logarithms of market capitalization) has mean of 24.3649 with standard deviation of 2.1105, and the minimum and maximum of 20.0420 and 27.9322 respectively. This shows that the values are centered around the mean value i.e. there is not much dispersion away from the mean because the standard deviation is less than the mean. Debt-to-equity ratio has a mean ratio of 0.6274:1, while the range is from the minimum ratio of 0.0044:1 up to a maximum of 1.7306:1. This shows that on average the firms have debt ratio of 63%, implying that firms prepared much of equity financing to debt financing. As the minimum values signifies that some firms did not have up to 1% debt, some firms’ debt financing surpass equity financing by 73%. The deviation of 0.4815 is an indication that there is not much dispersion around the average financing (0.6274). Moreover, Earnings per Share (EPS) has a mean of 3.0537, the range is from the minimum of -13.40 to a maximum of 28.57. This shows that on average, N3.05K per share was earned by the firms during the period 2007-2013. However, the minimum of (N13.40K) is an indication that some firms incurred loss per share to the tune of that amount, while the maximum is a clear indication that some firms were able to generate profit attributable to shareholders to the amount of N28.57K per share. There is a dispersion or variability of earnings among firms because the standard deviation of N6.35K is not closer to the mean of N3.05K.

<table>
<thead>
<tr>
<th>SMR</th>
<th>MC</th>
<th>DE</th>
<th>EPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>38.3265</td>
<td>64.4432</td>
<td>-84.8936</td>
</tr>
<tr>
<td>63</td>
<td>24.3649</td>
<td>2.1105</td>
<td>20.0420</td>
</tr>
<tr>
<td>63</td>
<td>0.6274</td>
<td>0.4095</td>
<td>0.0044</td>
</tr>
<tr>
<td>63</td>
<td>3.0537</td>
<td>6.7691</td>
<td>-13.40</td>
</tr>
</tbody>
</table>

Source: The Authors, 2015

The correlation matrix is used to determine the degree of association between independent variables and
dependent variable. It is also used to identify whether there is a relationship among the independent variables themselves, to be able to detect if multicollinearity problem exists.

From the table above, we can see that the correlation coefficient between SMR and MC is -0.3867 significant at 5% level. This suggest that there exist a significant negative association between market capitalization and stock market returns. This implies that the higher the market capitalization the lower the stock market returns and vice versa. Moreover, the correlation coefficient between debt-to-equity financing and SMR is 0.3626; suggesting a significant positive association between the two. The relationship between EPS and SMR is found to be significantly positive. This can be confirmed from the coefficient value 0.4387 at 5% significant level. This association is in tandem with the priori expectation found in the literature, EPS is expected to have positive association with stock market returns.

The relationships between independent variables themselves suggest to be minimal; as only EPS and MC have significant relationship. In order to access the presence of multicollinearity, the study further conducted multicollinearity test, using Variance Inflation Factor (VIF) and its reciprocal (1/VIF). The test reveals absence of multicollinearity, because VIF are consistently smaller than 10 while its reciprocal are consistently less than 1. The mean VIF is 1.07.

Robustness Tests
To avoid making wrong inferences, some robustness tests were conducted and the summary of the statistical result can be depicted from table 4.3 below

<table>
<thead>
<tr>
<th>Statistics</th>
<th>P-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hettest-Chi2</td>
<td>0.03</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.07</td>
</tr>
<tr>
<td>Hausman-Chi2</td>
<td>7.63</td>
</tr>
<tr>
<td>LMTRE-Chi2</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Source: The Authors, 2015

Note: LMTRE is ‘Breusch and Pagan Lagrangian Multiplier Test for Random Effect’

To test whether there exist heteroskedasticity in the data, the study used ‘Breusch-Pagan and Cook-Weisberg test for heteroskedasticity.’ The null hypothesis assumes that the variance of the residuals is constant. The test suggests absence of heteroskedasticity, as the chi2 value is 0.03 and the p-value is 0.8539. This attest that the model is good. In addition to that, multicollinearity test was also conducted using VIF and its reciprocal (1/VIF). No multicollinearity threat was found; as the VIF are consistently smaller than 10 while the reciprocal are constantly smaller than 1. The mean VIF is 1.07. All these proved absence of multicollinearity and suggest the appropriateness of the model in fitting the independent variables of the study.

Data for the study is panel in nature and panel data may lead to error that are clustered and possibly correlated overtime. This is because each company may have its own entity specific characteristic that can influence its stock market price (i.e. unobserved heterogeneity). And this may bias the outcome variables.
or even the explanatory variables. As such there is need to control for that. For that purpose, FE regression and RE regression were ran. The Hausman Test (HST) suggest that RE regression is more appropriate for the data. This can be seen from the Chi2 value of 7.63 with a probability value of 0.0543. This suggest no entity specific attributes affect the outcome variable.

Furthermore, by extension, the study test to see whether there is a statistical variance among the unit in the panel. To test for that, ‘Breusch and Pagan Lagrangian Multiplier Test for Random Effect’ was adopted. Finally, the test result reveals that there is no statistical significant variance among the unit in the panel data. This can be observed from the chi2 value of 0.01 and a P-value of 0.9356. Thus, this suggests that OLS technique is more appropriate for this study. Hence, the inference will be made based on the results produced by the OLS regression. Although, all the results for OLS, FE and RE regression will be provided for in the next sub-section for comparison purpose only.

| Table 4.4: Summary of Regression Result |

<table>
<thead>
<tr>
<th>Variable</th>
<th>OLS Regression</th>
<th>FE regression</th>
<th>RE Regression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficients</td>
<td>T-values</td>
<td>P-values</td>
</tr>
<tr>
<td>Const.</td>
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<td>0.023</td>
</tr>
<tr>
<td>MC</td>
<td>-7.990</td>
<td>-2.37</td>
<td>0.021</td>
</tr>
<tr>
<td>DE</td>
<td>40.866</td>
<td>2.39</td>
<td>0.020</td>
</tr>
<tr>
<td>EPS</td>
<td>3.115</td>
<td>2.96</td>
<td>0.004</td>
</tr>
<tr>
<td>R²</td>
<td>0.3389</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AdjR²</td>
<td>0.3053</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-Stat</td>
<td>10.08</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>W. Chi²</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: The Authors, 2015

Market Capitalization and Stock Market Returns

From the table, the t-value for MC is -2.37 and a beta coefficient of -7.990 with a p-value of 0.021. This implies that MC has a significant negative effect on SMR of listed food and beverages firm in Nigeria at 5% significant level. The beta coefficient indicates that an increase of MC by 1naira will lead SMR to reduce by 9.15%. This may be possible based on the argument that smaller firms tend to be riskier than the larger firms. As such market value of equity will push down to provide higher expected return, as opined by Berk (1995). This provides evidence for us to reject the null hypothesis earlier formulated, which states that MC does not have significant impact on SMR of listed foods and beverages. The finding is in line with those of Tudor (2011), Fama and French (1992) and Amir (2011)-as cited in Tahir, et al. (2013).

Debt-to-equity and Stock Market Returns

The impact of debt-to-equity ratio on stock market returns is found to be positive and statistically significant at 5% level. This can be confirmed from the t-value of 2.39 and a p-value of 0.020. This implies that capital structure measured in term of D/E have significant positive impact on the stock
market returns of listed food and beverages firms in Nigeria. The implication of this finding is that increase in the proportion of debt financing without corresponding increase in equity will lead to increase in stock market returns. This of course may be possible because shareholders will receive more returns in the period of boom and consequently affect stock market returns; and high levered firms are more risky for investment as such, more returns are associated with high risk. Therefore, the finding provides evidence to reject the null hypothesis which states that D/E has no significant effect on the SMR of listed food and beverages firms in Nigeria. The finding is in tandem with those of Khan, Naz, Khan, Khan & Ahmad (2013), Tudor (2006), Bhandari (1998), Yang et al. (2010), Ahmad et al. (2013), and Uwubanmwen & Obayagbona (2012).

**Earnings per Share and Stock Market Returns**
The beta coefficient and t-value of EPS are 3.115 and 2.96 respectively, with a p-value of 0.002. This shows that EPS has a strong and significant positive impact on SMR of listed food and beverages firms in Nigeria at 1% significant level. The coefficient of 3.115 is explaining that increase in EPS by 1 naira can lead to increase in SMR by 3.115%. The implication of this finding is that the higher the EPS the higher is going to be the SMR. This finding is in tandem with the priori expectation that earning should have incremental and significant effect on SMR. This provides evidence to reject the null hypothesis stating that EPS does not have significant impact on SMR of listed food and beverages firms in Nigeria. The finding has gotten support empirically from the works of Okoro and Stephen (2014), Tahir et al. (2013), Chambers et al. (2013) and Ahmed et al. (2013).

Cumulative result shows that the coefficient of determination ($R^2$) has a value of 0.3389. This indicates that the explanatory variables (MC, DE, and EPS) were able to explain the variation in the dependent variable (SMR) to the extent of 34%. The other 66% is explained by other factors not captured in the model. This could be macro and micro variables that also explained change in SMR. The adjusted $R^2$ (which adjusted for the number of variables in the model that have strong correlation) has a value 0.3053 (31%). This implies that MC, DE, and EPS play a significant role in explaining the expected stock market returns of listed food and beverages firms in Nigeria. The regression result reveals fitness of the model for having F-statistics of 10.08 and a p-value of 0.0000. The implication of this result is that the overall impact of the explanatory variables on the dependent variable is significant at 1% level, with 99% level of confidence. Finally we come to conclude by saying that some firm specific characteristics are playing a significant role in explaining stock market returns of listed food and beverages firms in Nigeria. Also, it provides additional evidence to support the view that apart from market beta (CAPM) and macroeconomic variables, there are also firm specific characteristics that influence market returns.

**Conclusions and Recommendations**
The study investigates the impact of certain firm specific characteristics on stock market returns of listed food and beverages firms in Nigeria for the period 2007-2013. The population comprises all the twenty-one (21) food and beverages firms listed on the NSE as at 31st December, 2013. Out of which nine (9) firms constitute the sample of the study. The study adopted both correlational and ex-post facto
research design. The data for the study was purely from secondary sources obtained from the annual report of the sampled firms as well as NSE fact book. Data was analyzed using several options of multiple panel data regression. But the most robust of all is OLS regression as suggested by Breusch and Pagan Lagrangian Multiplier Test for Random Effect. All the three variables of the study opposed to the stated hypotheses raised in section one. Based on this, the study has concluded that it has achieved its objective by answering the research questions as the finding revealed that market capitalization has a significant negative impact on stock market returns of listed food and beverages firms in Nigeria, while DE was found to have significant positive impact on stock market returns of listed food and beverages firms Nigeria. Furthermore, earnings per share was also found to have strong and significant positive impact on stock market returns of listed food and beverages firms in Nigeria. Based on the findings of the study it is recommends that government and policy makers (SEC) should design and implement more stringent rule where firms will be compelled and monitored on providing high quality financial reporting, so as to be reporting earnings that reflect their actual performance. This would prevent investors from falling on to the trap of earnings manipulation (as it happened to shareholders of Cadbury Nigeria plc.). In addition, prospective investors should not only focus on huge returns for investing in smaller capitalized or high levered firms; rather, further analysis need to be carried out to tradeoff between risk and returns.

References


Wakil, G. (2013). Value relevance of firm size proxies in predicting stock returns: market capitalization or total book assets. Carleton University, Sprott School of Business, Canada


**Appendix**
. reg SMR MC DE EPS

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 63</th>
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<tr>
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<td>3</td>
<td>29085.9186</td>
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<tr>
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<td>59</td>
<td>2885.14905</td>
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<tr>
<td>Total</td>
<td>257481.55</td>
<td>62</td>
<td>4152.92822</td>
<td>R-squared = 0.3389</td>
</tr>
</tbody>
</table>

| SMR | Coef.  | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|-----|--------|-----------|-------|------|----------------------|
| MC  | -7.989982 | 3.365297  | -2.37 | 0.021 | -14.72393 -1.256038 |
| DE  | 40.865599 | 17.08018  | 2.39  | 0.020 | 6.688635 75.04334 |
| EPS | 3.115069  | 1.051244  | 2.96  | 0.004 | 1.011533 5.218604 |
| _cons | 197.8487 | 85.04  | 2.33  | 0.023 | 27.6841 368.0134 |

. hettest
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of SMR
chi2(1) = 0.03
Prob > chi2 = 0.8539

. vif

<table>
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<th>1/VIF</th>
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</tr>
<tr>
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<td>DE</td>
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</tr>
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</table>

Mean VIF 1.07

. su SMR MC DE EPS

<table>
<thead>
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<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
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<td>6.76914</td>
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<td>28.57</td>
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</table>

. pwcorr SMR MC DE EPS, star (0.05) sig

<table>
<thead>
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<tbody>
<tr>
<td>MC</td>
<td>-0.3867*</td>
</tr>
<tr>
<td></td>
<td>0.0017</td>
</tr>
<tr>
<td>DE</td>
<td>0.3626*</td>
</tr>
<tr>
<td></td>
<td>0.0035</td>
</tr>
<tr>
<td>EPS</td>
<td>0.4387*</td>
</tr>
<tr>
<td></td>
<td>0.0003</td>
</tr>
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</table>
. xtreg SMR MC DE EPS, fe

Fixed-effects (within) regression

Number of obs = 63
Number of groups = 9

R-sq: within = 0.3722
between = 0.2984
overall = 0.3345

Obs per group: min = 7
avg = 7.0
max = 7

corr(u_i, xb) = -0.3285

F(3, 51) = 10.08
Prob > F = 0.0000

| SMR  | Coef.  | Std. Err. | t     | P>|t|  | [95% Conf. Interval] |
|------|--------|-----------|-------|------|----------------------|
| MC   | -7.216009 | 3.50572  | -2.06 | 0.045 | -14.25404 to -1.779823 |
| DE   | 52.80711  | 21.28716 | 2.48  | 0.016 | 10.07135 to 95.54287  |
| EPS  | 4.114077  | 1.130236 | 3.64  | 0.001 | 1.845035 to 6.38312   |
| _cons | 168.4481 | 88.65375 | 1.90  | 0.063 | -9.531742 to 346.4279 |

sigma_u   24.322823
sigma_e   52.730522
rho       .17543915 (fraction of variance due to u_i)

F test that all u_i=0:  F(8, 51) = 1.28
Prob > F = 0.2760

. est store fixed

. xtreg SMR MC DE EPS, re

Random-effects GLS regression

Number of obs = 63
Number of groups = 9

R-sq: within = 0.3660
between = 0.3302
overall = 0.3389

Obs per group: min = 7
avg = 7.0
max = 7

Random effects u_i ~ Gaussian

Wald chi2(3)   = 30.24
Prob > chi2    = 0.0000

| SMR  | Coef.  | Std. Err. | z     | P>|z|  | [95% Conf. Interval] |
|------|--------|-----------|-------|------|----------------------|
| MC   | -7.989982 | 3.365297 | -2.37 | 0.018 | -14.58584 to -1.394121 |
| DE   | 40.86599  | 17.08018 | 2.39  | 0.017 | 7.389459 to 74.34252  |
| EPS  | 3.115069  | 1.051244 | 2.96  | 0.003 | 1.054667 to 5.17547   |
| _cons | 197.8487 | 85.04    | 2.33  | 0.020 | 31.17341 to 364.5241  |

sigma_u   0
sigma_e   52.730522
rho       0 (fraction of variance due to u_i)

. est store random

. hausman fixed random

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>(b)</th>
<th>(B)</th>
<th>(b-B)</th>
<th>sqrt(diag(V_b-V_B))</th>
<th>S.E.</th>
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</thead>
<tbody>
<tr>
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<td>3.115069</td>
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<td>.4151114</td>
<td></td>
</tr>
</tbody>
</table>
Breusch and Pagan Lagrangian multiplier test for random effects

\[ \text{SMR}[^{id,t}] = Xb + u[^{id}] + e[^{id,t}] \]

Estimated results:

<table>
<thead>
<tr>
<th></th>
<th>Var</th>
<th>sd = sqrt(Var)</th>
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</thead>
<tbody>
<tr>
<td>SMR</td>
<td>4152.928</td>
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</tr>
<tr>
<td>e</td>
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<tr>
<td>u</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Test: \( \text{Var}(u) = 0 \)

\[ \text{chi}^2(1) = 0.01 \]

\[ \text{Prob} > \text{chi}^2 = 0.9356 \]
SORT ALGORITHMS AND DATA STRUCTURE: AN OVERVIEW
AND COMPARISON

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ABSTRACT
This research paper will take a look at sort algorithms and their efficiency. For this investigation two
types of data structures and five different sorting algorithms were selected. The selected sort algorithms
are: bubble sort, insert sort, selection sort, quick sort and merge sort. These algorithms together with two
selected data structures have been examined and analyzed for the primary purpose of choosing the most
effective among them. Algorithms use several computation resources, and their efficiency in our case is
derived by analyzing which one of the resources used is valued most. The resources which were studied
in this paper are: time of execution, amount of computer memory required and amount of effort invested
in implementation. The investigation was concluded and a most effective sort algorithm was identified.
But the question of the best algorithm was inconclusive. We found that some algorithms are effective with
small input size but not for large input size while other algorithms are not effective with small input size
but instead works better with larger input size. Therefore, the best algorithm for one case would not be
necessarily the best for all other cases. At the end, a sort algorithm was selected to best fit different cases
depending on particular scenarios.

Keywords
Algorithms, data structure, sorting, effectiveness, comparison, complexity theory

INTRODUCTION
Efficiency means the optimum use of all resources available on a computer. It should not be mistaken to
interpret as speed, because speed only takes one factor into account, which is time, while neglecting all
other factors [7]. Speed of a computer is one of the parameters that a computer creator have to optimize
together with memory utilization. A high speed computer is more expensive to make and buy, so we
should consider the effect of speed on other resources that does not increase the cost. Other resources could be functionality, power consumption, user-friendliness, and effort in computer development. To make a balance of what we want and what it cost we need to look at the efficiency of a computer and not its speed.

In this paper we are going to investigate sort algorithms and analyze their efficiency when we use them in a computer system. We will also analyze performance of an algorithm when we use different type of data structures. When writing a computer program, efficiency should be the most important factor to consider, especially when it comes to algorithm utilizations.

Let’s start by defining some basic concepts in computing. A computer system is made up of two components, namely hardware and software. The hardware is the tangible parts of the system. The software is the instructions and data of the system. A group of specialized instructions collaborating to complete a task are called a program. An independent set of operations contained in a program is called an algorithm.

An algorithm is a procedure which shows the steps and directions which a program follows to perform a particular operation. Apart from computer science, algorithms are also used in various other fields of science including mathematics, physics, statistics and life sciences. In computer systems, algorithms are used in various data processing activities such as calculations, summarizing, sorting, classifying and retrieval.

Our task for this paper is to look at two particular type of data structure and compare how they could be sorted by using five common sort algorithms. We shall analyze the variation in performance thereafter and come up with a conclusion.

First, some of the related works are explained in Section 2 before moving on to describe the sort algorithms in Section 3. Next, Section 4 provides information about the two data structure we have chosen for this investigation. We will describe different complexity of an algorithm in Section 5. In Section 6 we will talk about our environment and configuration before all tests and their results are presented in Section 7. Lastly, Section 8 will conclude this paper.

RELATED WORKS

There have been a lot of previous research on sort algorithms. We explored many and got motivated by the find of some of the research. Mishra A.D. and Garg D [4] presented a paper on this topic. In their paper (2008) they explored the various sort algorithms available. Worst cast, average case and operational methods of each algorithms were compiled. They also explain of find an optimum and not best algorithm instead. This was as a results of their investigation and observation.

You Yang, Ping Yu, and Yan [9] in their paper (2011), have defined a various trade-off when selecting a sorting method. They also explore the time and space complexity concept to explain the performance for each algorithm they investigated. Their paper also had some interesting conclusion of advantages and disadvantages from their experiments on the algorithms.

We also compared work from another research group consisting of Dharmjeet and Rajesh [3]. In their
paper (2012) they identified the different forms of sorting. They also identified the various scenarios where one particular algorithm performed better than the other and not in all scenarios. One algorithm was not always suitable for all scenario. Their work concluded by illustrating how each methods has positive and retrogressive effects. Throughout our research time we have found little information made to compare the performance of these sort algorithm when using different data structures. We have therefore included in our research the question how different sort algorithms would perform if using different data structure.

SORT ALGORITHMS

Sort algorithms are used to move around elements in a data structure so that in the end becomes a sorted sequence. There are various sort algorithms out there, but for this study we have chosen five algorithms which are the most common used. Below we will explain these algorithms in detail how they work together with a simple example.

Bubble sort

This sorting method is one of the simplest [7] and it contains two main loops which are nested. The first loop will guarantee that every element will be compared with each other n number of times. This is to make sure that the last element in an unsorted sequence can be moved to the first position if that element is the lowest one. The second loop contains a comparison with an element and the element next to it. If the next element is smaller there will be a swap between those two elements.

If we use the sequence [5, 1, 8, 2] as an example, the first comparison will be between number 5 and 1. If the value to the left is greater than the value to the right a swap will be performed. Since 1 < 5 the sequence is changed to [1, 5, 8, 2]. Next, 5 and 8 will be compared to each other and this time, no swap is required. The final comparison in the first iteration will be between 8 and 2, and this time a swap will occur. The sequence is now [1, 5, 2, 8]. The second iterations start with comparing the first and the second value, and here there will be no swap. The next swap is during the second comparison between 5 and 2. The sequence is now changed to [1, 2, 5, 8]. Since the sequence is ordered now, the remaining comparisons and iterations will result in no more swapping.

Selection sort

Selection sort [7] is also quite simple like bubble and insertion sort. The algorithm always start at the first element and search through the whole unsorted sequence to find an element which is smaller. If a smaller value is found, a swap will occur. Then it moves up to the second element and searches for the smallest values to the right. It continues like this until the whole sequence is sorted.

For an example we use a sequence that hold the elements [7, 9, 2, 1, 5]. First step is to start at the first element and loop trough each element to the right and store the value that is the smallest. In this case, it is the fourth element which contains number 1. The algorithm then swaps the first and fourth element. The
sequence is now [1, 9, 2, 7, 5]. Next, the second value will get replaced by the next lowest element, which is the third one, and the sequence will now look like this: [1, 2, 9, 7, 5]. If we continue like this, the third element will get swapped with the fifth element, then the fourth element will get swapped with the last element, generating the final sorted sequence: [1, 2, 5, 7, 9].

**Insertion sort**

The insertion sort [7] algorithm starts by comparing the two first elements. If the second element is smaller than the first one, there will be a swap between those. The third element will then compare itself with the elements to the left until it finds a spot. This process will then proceed with the remaining elements in the same way. When the last element have found its place in the sequence, all elements will then be sorted.

For example, if we have a sequence of [4, 1, 7, 2, 9, 3] the second element will be compared to the first one. Since 4 > 1, there will be a swap. The sequence will then be [1, 4, 7, 2, 9, 3]. Moving to the third element, we can see that the element is already in the correct spot. The fourth element will first be compared to number 7. Since 2 < 7, it will move on to compare with the next element, 4. Here the comparison is 2 < 4, same as the last comparison, and the execution will continue to the next element. When comparing to number 1 we have found the correct spot for number 2, since 2 > 1. The steps are the same for the fifth and sixth element. The fifth element will remain in the same spot, because 9 > 7. The sixth and last element will compare with all the left elements until it finds the correct spot between number 2 and 4. The final sequence will then be [1, 2, 3, 4, 7, 9].

**Merge sort**

Merge sort [1] starts by dividing up all the elements into n sub-lists. Afterwards, each sub-list is compared to the next one and merge into a new sorted sub-list containing two elements. This process is repeated for the remaining sub lists until there are only sub-lists with two elements in them (except for the last one, if the sequence have odd number of elements). Next step is to compare these new sub-lists with one next to it so it will create another new sub-list which will hold four sorted elements. Next time, the sub-list will have eight sorted elements, and so on, until there is only one remaining list. This list will be the finalized sorted sequence.

If we take an example sequence of [5, 9, 6, 1] the first step is to divide everything into sub-lists. These lists will be [5], [9], [6] and [1]. The comparison will start with [5] and [9]. These will get merged into a new one, which is also sorted: [5, 9]. Sub-lists [6] and [1] will get merged into [1, 6]. We then have two sub-lists, and these two will then merged into one final sorted list. The comparison will start by comparing the first elements in both sub-lists. Since 1 < 5, the new list will start by having [1] in it. Then, number 5 is compared to the next one in the second sub-list. Here, 5 < 6 so number 5 will be put into the new list, now containing [1, 5]. The final comparison is between number 9 and 6. Number 6 is less than 9 so 6 will be put into the list. Lastly, number 9 will be put at the last position in the new list. The final merged sorted sequence is now [1, 5, 6, 9].
Quick sort

When using quick sort [1] one must first decide a pivot element. The pivot element is usually a random element in a sequence. All elements that are less or equal to the pivot element are placed to the left and all greater elements placed to the right. After this process the pivot element is located at the correct spot. The process is then repeated for the elements to the right and left of the pivot element. These now two sub-lists will have a new pivot and do the same as before: all lesser elements to the left and all greater to the right of the pivot element. When this is repeated until all sub-lists are sorted, they will be merged into one final list.

If we take an example sequence that contains the elements [6, 1, 3, 7, 2, 9, 4] we first start by deciding the pivot element. We decide that the first pivot will be 3. Then the first element and the element at the far right will be compared with the pivot value. In this case 6 is greater than the pivot which means that the number 6 will be moved to the right side. Number 4 is already on the correct side. Next, number 9 will be compared to the pivot. This number is also on the correct side. However, number 2 is lower than the pivot and will therefore switch place with number 6. The sequence is now [2, 1, 3, 7, 6, 9, 4].

Next, number 1 and 7 will compare with the pivot. Since both numbers are in correct side no swap is needed. As it is now, we have all numbers lower than the pivot value to the left and all greater to the right. Therefore, the pivot value 3 is now in correct spot. We can now say we have divided the sequence into two sub-lists: [2, 1] and [7, 6, 9, 4]. The process of selecting a pivot and doing the switching is the same as before. The first sub-list will become [1, 2]. For the second one, if we choose number 6 as a pivot, the sequence will be [4, 6, 9, 7]. Once again, these will be divided into two sub-lists: [4] and [9, 7]. The second sub-list will become [7, 9]. Now we have these sub-lists: [1, 2], [3], [4], [6], [7, 9]. If we combine them all we will get the final sorted sequence: [1, 2, 3, 4, 6, 7, 9].

DATA STRUCTURES

Data structure [7] is a specialized format for arrangement and organization of data to make it easier to process it. It defines rules of how data could react to a set of algorithms for a defined purpose. Data is a set of organized facts, and if these facts are arranged and organized in a special way, then we have a data structure. Examples of data structures include arrays, queues, stacks and lists. In computer science data structures are usually used by algorithms and their efficiency varies from algorithm to algorithm.

For example: given we have the data structures A, and B, and the algorithms X and Y. Data structure A can be operated on by algorithms X and Y. We then compare the amount of resources used by each of these two algorithms. For this example X may take half the time and a quarter amount of space as Y. In this case X spends less time and less space, hence X is more efficient. The fact that X is more efficient than Y eliminates Y as an option. To improve efficiency it is not limited only to which algorithm is used but also which data structure the algorithm is being used on. In the example above X is more efficient than Y when performing operations on data structure A, but if the same operations are being made on data structure B, it could be possible that Y is more efficient than X.
Therefore, the search for efficiency can be determined either by the algorithm, the data structure or even both. For practical purposes, in our investigation we shall narrow our research on two data structures. These could easily be expanded to include many more data structures if necessary in future investigations.

**Arrays**

An array [8] is a group of element of the same type of which each member has a specifically defined location in that group. Same type means an array could be made only of integers, characters or any other type supported by the implementation language. The elements have defined position in rows and columns arrangement. The group can be one dimension or multiple dimension in size. A one dimension array is called a vector and a multiple dimension array is called a matrix. They are arranged in continues memory with no blank space between two consecutive elements. Because of this, searching an array is very fast and efficient. All element are accessed as if they are next to each other. ACCESS TIME is the same for every element to another element.

**Figure 1: Array: All element are accessed as if they are next to each other. Access time is the same for every element.**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

In figure 1 an example of an array is illustrated. This data structure allow direct access from one element to any other. The time to access any element in the sequence is the same. For example the access time from A to B is equal to the access time from A to H.

**Linked lists**

A linked list [8] is an interconnection of data nodes by referencing. One data node is connected by another through a specified link. The position of one node in relation to the other is not important but the connecting path to that element is what is important. Say you have four nodes, A, B, C, and D. To access B from A, ordinarily, you would move one step to the right and you access B. But using linked list it might not always be that simple. A particular linked list might agree with that method as long as there was a defined path like that. Another variation of a list might require that you have to first move from A through D, then C, and then lastly reach B. In linked list the address is not considered but the defined logic of access is considered, which the connecting path is. In figure 2, a simple single linked list is shown.

**Figure 2: Single linked list: Address of element are known from A to E, but unknown from E to A.**
There are several types of linked lists. The simplest is the single linked list as our above example assuming there are no other ways of reaching B. Another type is the double linked list where not only the next node is defined but also the previous node. Circularly linked list is a type where the start node of a list is connected all the way to the end node making a circle-like connection [2]. We will only use single linked lists in our investigation. Below, in figure 3, is an illustration of a double linked list.

**Figure 3: Double linked list: Addresses of element are known from A to E and also from E to A.**

TIME AND SPACE COMPLEXITY

In this section we will describe the complexity of the five algorithms we have chosen for this paper. There are two types of complexity we will cover: time and space. Time complexity is simply how long an algorithm will take depending on the number of input elements and iterations. Space complexity is how much memory space is needed when performing an algorithm. We can define these complexities by using the big-oh notation [5].

There are some variations of big-oh in defining algorithms efficiency. First we have a constant complexity O(1) which means that an algorithm has the same speed all the time, no matter what elements it is working with. Second, with a linear complexity O(n) an algorithms’ performance increases in proportion to the amount of input elements. Then we also have O(n²) which the performance increases in proportion to the square of the size of a list. Last, we have a logarithmic complexity O(logn). This gives an algorithm a performance that grows in the same way as a curve of a logarithmic formula [6]. Table 1 shows the sort algorithms together with their time and space complexities using big-oh.

Below we can see that bubble sort, selection sort and insertion sort all have the average of O(n²) and merge sort...
Table 1: Time and space complexity for the sort algorithms

<table>
<thead>
<tr>
<th>Algorithms</th>
<th>Average time</th>
<th>Worst time</th>
<th>Average space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bubble</td>
<td>$O(n^2)$</td>
<td>$O(n^2)$</td>
<td>$O(1)$</td>
</tr>
<tr>
<td>Selection</td>
<td>$O(n^2)$</td>
<td>$O(n^2)$</td>
<td>$O(1)$</td>
</tr>
<tr>
<td>Insertion</td>
<td>$O(n^2)$</td>
<td>$O(n^2)$</td>
<td>$O(1)$</td>
</tr>
<tr>
<td>Merge sort</td>
<td>$O(n \log n)$</td>
<td>$O(n \log n)$</td>
<td>$O(n)$</td>
</tr>
<tr>
<td>Quick sort</td>
<td>$O(n \log n)$</td>
<td>$O(n \log n)$</td>
<td>$O(\log n)$</td>
</tr>
</tbody>
</table>

and quick sort $O(n \log n)$. If we take bubble sort algorithm we know that it contains two loops which are nested. This means that every value will get compared to each other $n$ times, hence $n^2$. Same thing applies for selection sort and insertion sort. When it comes to space, $O(1)$ signifies that the memory space remain constant throughout the whole algorithm process.

For merge sort and quick sort the average time is $O(n \log n)$. Both algorithms divide itself into several sub-lists until it cannot be divided any more or if the new created sub-list is already sorted, hence the $\log(n)$. Then, $n$ comparisons are needed until the whole sequence is guaranteed to be sorted. When it comes to required memory space, merge sort require more than quick sort. The reason for that is that merge sort divide into more sub-lists than what quick sort does. Merge sort does not start the sorting procedure until the whole sequence is divided into sub-lists containing one element. Therefore, the space is the same as the amount of elements, $n$. Quick sort use a pivot value and sort the right side and left side of it before the dividing occurs. Since the dividing stops when all sub-lists are sorted, $O(\log n)$ is the average approximation. However, in a worst case situation the space required can go up to $O(n)$, same as merge sort.

**METHOD**

For the experiment, we are going to use a modern UNIX system with an i5 4.0 GHz CPU. The test program is constructed using the C language together with the compiler GCC. With this system we have put up six test cases, three for each data structure. We are going to test three different set of numbers for sorting. First, the program will generate random numbers to be sorted. Next, a reversed order will be inserted into the data structure. Finally, it will be filled with the same values. We hope that each one of these test cases will give us some interesting outcome.

When the program starts, it will first generate a set of records and put it into an array or a list. The size of it will be predefined before running. In this case, we have decided to start with 1000 records and go up step by step to 100000. More than that will take too much time, but 100000 records will be enough to see a pattern. After the array or list has been initialized with values the sorting can be started. Right before the function call to a sort, a timer will start. The timer will end when the sort algorithm finishes its execution. When one sort algorithm is done, a new array or list is generated with the exact same set of values, before running the next algorithm. This will be repeated until all sort algorithms has been executed.
To get a more accurate time data, each test is run ten times which gives us an average. When using random numbers, a seed is utilized so that we can generate same numbers every time we run the test. Each iteration receives a new random seed from a predefined array, so even if we run the same test many times, the results are about the same. We also want to be able to verify that the sorting is done correctly. This is done by a function that searches through the whole data structure to see if the sorting has been done correctly. The implementation for sorting a linked list and an array has one important difference. When sorting an array, a lot of comparisons are made and if something needs to change place, a swapping of data is occurred. A linked list is a little different when it comes to swapping. Since a record in a linked list points to the next record, all it’s needed to do is swapping the pointers, and not the data itself. This difference might be important to keep in mind.

**EXPERIMENT**

Here we will present our tests and see how the sort algorithms perform depending on the data structure and the contents of them. We then try to decipher the result and see if we get expected or some unexpected outcome. This section is divided into two parts: array and linked list. All time cost presented in tables are measured in seconds.

<table>
<thead>
<tr>
<th>Records</th>
<th>Bubble</th>
<th>Select</th>
<th>Insert</th>
<th>Merge</th>
<th>Quick</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>0.003</td>
<td>0.001</td>
<td>0.001</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10000</td>
<td>0.302</td>
<td>0.105</td>
<td>0.06</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>20000</td>
<td>1.295</td>
<td>0.417</td>
<td>0.236</td>
<td>0.003</td>
<td>0.002</td>
</tr>
<tr>
<td>30000</td>
<td>2.993</td>
<td>0.938</td>
<td>0.53</td>
<td>0.004</td>
<td>0.003</td>
</tr>
<tr>
<td>40000</td>
<td>5.429</td>
<td>1.668</td>
<td>0.939</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>50000</td>
<td>8.547</td>
<td>2.605</td>
<td>1.472</td>
<td>0.007</td>
<td>0.007</td>
</tr>
<tr>
<td>75000</td>
<td>19.427</td>
<td>5.866</td>
<td>3.315</td>
<td>0.01</td>
<td>0.012</td>
</tr>
<tr>
<td>100000</td>
<td>34.549</td>
<td>10.417</td>
<td>5.885</td>
<td>0.014</td>
<td>0.018</td>
</tr>
</tbody>
</table>

**Array**

First off, we use arrays as a data structure. Table 2 shows the first results when using random generated numbers. First, we notice all sort algorithm is close to each other when handling small amount of data. It is first when we reach above 20000 it starts to get noticeably different. Bubble sort is, as expected, slowest of them all, followed by insertion sort and selection sort which both are pretty close to each other. At the bottom, both merge sort and quick sort are running neck in neck. Here we can see that quick sort is faster
when sorting records fewer than 50000. For larger arrays, merge sort is the quicker one.

Next, we run a test with revered sorted list. You can see in Table 3 the result of that test.

If we run the same tests, but with arrays containing a reversed order from the beginning, we can see that in almost all cases, sorting records in a reversed order is slightly faster. Only insertion sort takes a little more time. The reason is that the insertion algorithm starts at the first value and steps through each value from the beginning to the end in the first iteration. Next iteration, the algorithm starts at the second value and walks to the end, and so on. Since

<table>
<thead>
<tr>
<th>Records</th>
<th>Bubble</th>
<th>Select</th>
<th>Insert</th>
<th>Merge</th>
<th>Quick</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>0.003</td>
<td>0.001</td>
<td>0.001</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10000</td>
<td>0.27</td>
<td>0.099</td>
<td>0.118</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>20000</td>
<td>1.07</td>
<td>0.396</td>
<td>0.47</td>
<td>0.002</td>
<td>0.001</td>
</tr>
<tr>
<td>30000</td>
<td>2.416</td>
<td>0.89</td>
<td>1.064</td>
<td>0.002</td>
<td>0.002</td>
</tr>
<tr>
<td>40000</td>
<td>4.292</td>
<td>1.583</td>
<td>1.887</td>
<td>0.003</td>
<td>0.003</td>
</tr>
<tr>
<td>50000</td>
<td>6.696</td>
<td>2.473</td>
<td>2.946</td>
<td>0.004</td>
<td>0.003</td>
</tr>
<tr>
<td>75000</td>
<td>15.066</td>
<td>5.563</td>
<td>6.631</td>
<td>0.006</td>
<td>0.005</td>
</tr>
<tr>
<td>100000</td>
<td>26.838</td>
<td>9.894</td>
<td>11.78</td>
<td>0.009</td>
<td>0.007</td>
</tr>
</tbody>
</table>

all values are in the wrong location, every value needs to be swapped in all steps and in every iteration. Because of this procedure, this algorithm takes more time to finish.

For the last test on arrays, we insert the same number for all records, to see how the algorithms handle arrays with identical values. The result is displayed in Table 4.

<table>
<thead>
<tr>
<th>Records</th>
<th>Bubble</th>
<th>Select</th>
<th>Insert</th>
<th>Merge</th>
<th>Quick</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>0.002</td>
<td>0.001</td>
<td>0</td>
<td>0</td>
<td>0.001</td>
</tr>
<tr>
<td>10000</td>
<td>0.197</td>
<td>0.104</td>
<td>0</td>
<td>0.001</td>
<td>0.091</td>
</tr>
<tr>
<td>20000</td>
<td>0.786</td>
<td>0.417</td>
<td>0</td>
<td>0.002</td>
<td>0.362</td>
</tr>
<tr>
<td>30000</td>
<td>1.768</td>
<td>0.938</td>
<td>0</td>
<td>0.002</td>
<td>0.815</td>
</tr>
<tr>
<td>40000</td>
<td>3.143</td>
<td>1.667</td>
<td>0</td>
<td>0.003</td>
<td>1.448</td>
</tr>
<tr>
<td>50000</td>
<td>4.914</td>
<td>2.605</td>
<td>0</td>
<td>0.004</td>
<td>2.264</td>
</tr>
<tr>
<td>75000</td>
<td>11.051</td>
<td>5.86</td>
<td>0</td>
<td>0.006</td>
<td>5.088</td>
</tr>
<tr>
<td>100000</td>
<td>19.644</td>
<td>10.415</td>
<td>0</td>
<td>0.009</td>
<td>9.047</td>
</tr>
</tbody>
</table>

In this test, we can see some changes. Insertion sort takes more or less zero seconds to complete, because during its first iteration, it cannot find any new location for any of the records in the array. If we continue to quick sort, we can see that the algorithm has a hard time handle this test. Even if all records are sorted,
quick sort still checks every record trying to find a location to swap. The nature of the algorithm simply cannot handle a set of records that are already sorted. As for the rest of the algorithms, they perform a little faster than all the previous tests.

**Linked list**

We have now tested to sort arrays with the five algorithms. Next up is to use single linked list. Table 5 shows how the first test with random numbers resulted.

**Table 5: Time cost for linked list with random numbers**

<table>
<thead>
<tr>
<th>Records</th>
<th>Bubble</th>
<th>Select</th>
<th>Insert</th>
<th>Merge</th>
<th>Quick</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>0.002</td>
<td>0.001</td>
<td>0.001</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10000</td>
<td>0.288</td>
<td>0.14</td>
<td>0.138</td>
<td>0.002</td>
<td>0.002</td>
</tr>
<tr>
<td>20000</td>
<td>1.223</td>
<td>0.56</td>
<td>0.849</td>
<td>0.004</td>
<td>0.005</td>
</tr>
<tr>
<td>30000</td>
<td>2.827</td>
<td>1.26</td>
<td>2.281</td>
<td>0.006</td>
<td>0.008</td>
</tr>
<tr>
<td>40000</td>
<td>5.112</td>
<td>2.237</td>
<td>4.285</td>
<td>0.008</td>
<td>0.011</td>
</tr>
<tr>
<td>50000</td>
<td>8.085</td>
<td>3.498</td>
<td>7.181</td>
<td>0.011</td>
<td>0.014</td>
</tr>
<tr>
<td>75000</td>
<td>18.407</td>
<td>7.864</td>
<td>17.467</td>
<td>0.018</td>
<td>0.023</td>
</tr>
<tr>
<td>100000</td>
<td>32.447</td>
<td>13.997</td>
<td>31.379</td>
<td>0.025</td>
<td>0.033</td>
</tr>
</tbody>
</table>

Comparing to table 2 one can witness that sorting random numbers in single linked list is slightly faster than sorting arrays. As mentioned in Section 5, linked list does not swap their values. What is swapped instead is what the record in the list points to. This procedure takes less time than just plain swapping the data. Another thing to take notice on is that selection sort is faster than insertion sort. With arrays, it is the other way around. The reason is the same here for selection algorithm as the other algorithms, but selection sort takes more advantage of just swapping pointers rather than data.

**Table 6: Time cost for linked list with values in reversed order**

<table>
<thead>
<tr>
<th>Records</th>
<th>Bubble</th>
<th>Select</th>
<th>Insert</th>
<th>Merge</th>
<th>Quick</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>0.003</td>
<td>0.001</td>
<td>0.001</td>
<td>0</td>
<td>0.004</td>
</tr>
<tr>
<td>10000</td>
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<td>0.14</td>
<td>0.001</td>
<td>0.399</td>
</tr>
<tr>
<td>20000</td>
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<td>0.561</td>
<td>0.002</td>
<td>1.585</td>
</tr>
<tr>
<td>30000</td>
<td>2.559</td>
<td>1.253</td>
<td>1.263</td>
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</tr>
<tr>
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<td>2.224</td>
<td>2.231</td>
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<td>6.373</td>
</tr>
<tr>
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<td>7.099</td>
<td>3.485</td>
<td>3.491</td>
<td>0.004</td>
<td>9.965</td>
</tr>
<tr>
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<td>7.849</td>
<td>0.007</td>
<td>22.41</td>
</tr>
<tr>
<td>100000</td>
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<td>13.966</td>
<td>14.078</td>
<td>0.009</td>
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</tr>
</tbody>
</table>
Table 6 shows the time costs for single linked list with data in reversed order. What can be seen here is that both insertion sort and selection sort have an almost identical time. It took some time to figure out why, but after inserting an iteration counter, we could see that both algorithms perform same amount of loops. Since the records are in reversed order both algorithm also perform same amount of pointer swapping. We can also see that quick sort is very slow, even slower than bubble sort. One may wonder why bubble sort, one of the slowest sort algorithms, is faster than quick sort. Quick sort use a pivot to build two lists of elements, one for elements lower than pivot and one for elements higher than pivot. Since the order of elements is reversed, the amount of recursions to receive lower and higher elements and sort them, takes longer time due to the impact of many needed iterations and recursions.

<table>
<thead>
<tr>
<th>Records</th>
<th>Bubble</th>
<th>Select</th>
<th>Insert</th>
<th>Merge</th>
<th>Quick</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>0.002</td>
<td>0.001</td>
<td>0.001</td>
<td>0</td>
<td>0.002</td>
</tr>
<tr>
<td>10000</td>
<td>0.155</td>
<td>0.14</td>
<td>0.14</td>
<td>0.001</td>
<td>0.214</td>
</tr>
<tr>
<td>20000</td>
<td>0.617</td>
<td>0.559</td>
<td>0.561</td>
<td>0.002</td>
<td>0.84</td>
</tr>
<tr>
<td>30000</td>
<td>1.393</td>
<td>1.26</td>
<td>1.263</td>
<td>0.002</td>
<td>1.933</td>
</tr>
<tr>
<td>40000</td>
<td>2.47</td>
<td>2.237</td>
<td>2.233</td>
<td>0.003</td>
<td>3.438</td>
</tr>
<tr>
<td>50000</td>
<td>3.849</td>
<td>3.495</td>
<td>3.505</td>
<td>0.004</td>
<td>5.268</td>
</tr>
<tr>
<td>75000</td>
<td>8.719</td>
<td>7.914</td>
<td>7.94</td>
<td>0.007</td>
<td>11.95</td>
</tr>
<tr>
<td>100000</td>
<td>15.405</td>
<td>14.132</td>
<td>14.063</td>
<td>0.009</td>
<td>21.701</td>
</tr>
</tbody>
</table>

Our last test use single linked list with data that has the same values. In table 7 we can see that once again both insertion and selection sort have nearly the same time. The explanation is the same as above. Quick sort is also very slow here as well. It is not as slow as when the elements are in reversed order, but it is still slower than bubble sort. The explanation is similar, but in this case, all picked pivot is identical meaning that each recursion scrolls over all records every time without finding any elements to swap.

CONCLUSIONS

The work above has been a deeper look into various test cases for the most common sort algorithms with two different data structures. Our goal was to find the most efficient and most appropriate algorithm depending on the situation. Together with our information about space and time complexity, and our tests we presented above, we can draw some conclusions which algorithm suits the best in various situations. After some consideration of all possible situations, we

<table>
<thead>
<tr>
<th>Algorithm</th>
<th>Disadvantage</th>
<th>Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bubble</td>
<td>1. Very slow with many</td>
<td>1. Easy to understand and implement</td>
</tr>
</tbody>
</table>
have table 8 above describing advantages and disadvantages for each algorithm. If we start with bubble sort it is for the most time slowest of them all. If you want a simple sort algorithm that is easy to implement and the amount of records to sort is fewer than 10000, then bubble sort works really well. But still, there are other simple sort algorithms that are better: selection sort and insertion sort. Both are also easy to implement and have a decent speed when dealing with small to medium sized arrays and lists. Insertion sort is especially efficient when most of the elements already are correctly sorted. A disadvantage for these two is the same, dealing with large sized arrays or lists. However, it is not as bad as bubble sort. If you take into account the amount of memory space that is required, all three sort algorithms are a good choice since all of them have a constant memory space (O(1)).

Then we come to the two quicker algorithms: merge sort and quick sort. These two require a little more memory space because of the dividing and recursions. However, both of them are very fast and efficient. In our tests, merge is slightly faster in larger sets, and more equal when sorting smaller to medium sized sets. Quick sort have some trouble dealing with elements that are in reversed order and elements that hold the same values. This is, however, not a normal case where elements are in complete reversed order, but it is worth taking note of. Merge sort take care of these two specific situations with ease. Therefore, according to our experiment, merge sort is the better algorithm when hunting for better time if memory space is not an issue.

When it comes to the comparison between data structures, the difference is not that huge. But if you consider a computer system with millions of running algorithms, then the differences may be noticeable. One can say that using array or a singled linked list does not really matter in small cases, especially on our test system. Since our system is quite modern and powerful the differences may not be showing. There may be some differences when using older systems, but that is for a future investigation.

| Algorithm | Elements | Selection
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>1. Poor efficiency when dealing with huge lists</td>
<td>1. Decent speed when working with small amount of elements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Easy to implement</td>
</tr>
<tr>
<td>Insertion</td>
<td>1. Does not handle huge lists too well</td>
<td>1. Easy to implement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Decent speed when working with small amount of elements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Works well when most of the elements are sorted</td>
</tr>
<tr>
<td>Merge</td>
<td>1. More complex to implement</td>
<td>1. Fast in all cases</td>
</tr>
<tr>
<td></td>
<td>2. Takes up more memory space</td>
<td>2. Efficient</td>
</tr>
<tr>
<td>Quick</td>
<td>1. Slow when most of the elements are already sorted</td>
<td>1. Efficient</td>
</tr>
<tr>
<td></td>
<td>2. Worst case the same as bubble sort</td>
<td>2. Fast on small and big random lists</td>
</tr>
<tr>
<td></td>
<td>3. More complex to implement</td>
<td></td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS:
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REFERENCES


OPPORTUNITIES, CHALLENGES AND PROSPECTS FOR

ECOTOURISM DEVELOPMENT IN DIDA HARA CONSERVATION
SITE, BORENA NATIONAL PARK, ETHIOPIA

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Abstract
Ecotourism development depended on the identification of challenges and opportunities and projecting the future operation from the perspectives of different stakeholders. Therefore, the main objective of this research is identifying challenges and opportunities and describe what should be done in the future for the successful development of ecotourism in the Dida Hara conservation site of Borena National park, Oromia Regional state, Ethiopia. The study used qualitative methods. The data were collected by using interview, field observation, focus group meeting and secondary document analysis. Interview was conducted with key office personnel’s, tour operators and selected local community representatives and selected by using non probability sampling technique.

The destination faced/s increasing human and wildlife conflict, lack of marketing and promotion, inadequate value creation and product diversification, inadequate infrastructural stock, limited skill labor force, limited partnership and cooperation and lack of researching and inventory challenges. Many external and internal opportunities are also identified including Ethiopia Kenya power system interconnection project, ecotourism demand, and geographic proximity with Kenya, presence of Bule Hora University and many others. Based on the views of different stakeholders the future operation of the destination is projected and strategic actions are forwarded including specific recommendations.

Keywords:
Destination, Dida Hara Conservation Site, Borena National Park, Ecotourism, Stakeholders, Site

1. Introduction
1.1. Background of the study

As one form of sustainable tourism, ecotourism described as "purposeful travel to natural areas; to understand the cultural and natural history of the environment; taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make conservation of natural resources beneficial to local people”. Sustainability integrated in the ecotourism principle in economic, cultural, social and environmental aspect. In more new sense ecotourism further developed as the concept and
practice of community based approach for more sustainable tourism development. In the community based approach of development, ecotourism guided in community cooperative paradigm (Sefrin, 2012). Practically ecotourism activity focuses on experiencing and learning about nature, its landscape, fauna, flora and their habitats as well as cultural artifacts from the locality. In this regard, the contribution of ecotourism in the world travel market is very high and competitive. The UNWTO calculation shows that, the economic contribution of ecotourism grow annually with 20%, which is 5 times more than the average growth of the tourism industry. This alarming growth is seen due to the increasing of environmental awareness and interest, an increasing desire to see the natural places before they disappear, an increasing dissatisfaction with “traditional” tourism destination and products, an increasing desire to go a novel destination and other reasons.

In Ethiopia, ecotourism development emerged as a sustainable form of tourism. As indicated by Khan, Ecotourism is seen as a viable option for self-sustaining tourism development and tools for sustainable long-term planning that is highly controlled if the necessary natural, cultural and human resources are available (Khan, 1997). As Paul Henze describe, the Ethiopian tourism activity always involved a features of ecotourism (Henze, 2007).

This industry does not exist and develop without problems and fragmentation. No countries develop tourism without necessary facility and tourism products that make the difference in the destination and identification of their challenges and by identifying the challenges and consulting different stakeholders the countries and researcher develop a future operation of the tourism industry (Dabour, 2003). Like many other developing country, Ethiopia, greatly investing in sustainable form of tourism, ecotourism as the potential and reliable economic sector (Sefrin, 2012). In this regard, Ethiopia endowed with ancient historical and cultural heritages, wild life resources, and attractive geographical sites and many others. Due to the presence of tourism resources, the influx of tourists from every corner of the world to Ethiopia increases the growth and development of tourism industry (Mitchell and Coles, 2009).

However, the tourism products of Ethiopia in the specific destination of the country not greatly identified and promoted for the tourism development diversification and sustainability (Sefrin, 2012). By studying the challenges in well developed parks of the country, ecotourism established as the sustainable option in tourism sector. The remaining parks are not well studied in related to their challenges and what will be operated in the future for ecotourism development.

Paul Henze added that, the Ethiopian national parks are found in the elementary stage of development and their rich resources, managements and the challenges are lacked a research work(Henze. 2007). Thus, based on these research gaps, the concern of this research is to identify the best opportunities and challenges of the Borena National park in specific site of Dida Hara site for Ecotourism development as well as describe the future operational development in the site. Based on this major objective this research give answer the following research questions

1. What are the best opportunities to develop ecotourism in Dida Hara conservation site of Borena National park?
2. What are the challenges that faced/s Dida Hara conservation site of Borena National park to bring ecotourism?
3. What will be the future operation of the Dida Hara conservation site in Borena National park for the development of ecotourism?

2. Methodology

2.1. Description of the Study Area

Borena national park is registered as the wild life sanctuary in Borena zone, Oromia Regional State. From its establishment up to 1996 the sanctuary was administered by National wild life conservation agency of Ethiopia. According to the Ethiopian Wildlife and Natural History Society, the national park is lies 565 kilometers south of Addis Ababa on the Hawassa-Moyale road. The park is important for a number of mammals and rare bird species. Endemic mammal in this park is Swayne’s Hartebeest (now it is disappeared from the park). There are also a lot of endemic bird species found in this national park. More than 280 species of birds have been recorded of which 62 are Somali-Masai Biome species. The site affords protection to 64% of Ethiopia’s Somali-Masai Biome assemblage.

Currently Borena national park grouped in to three conservation sites. These are the following:

Dirre site: - Dirre site has include more than three sub-site/block/ these are; Danbala Dibayu, Dida Soda /include Madacho/and Mega mountain chain to Magado. It contains many species of animals, birds and beautiful landscape.

Sarite site: - this site is very rich in forest and with richest in animal species and particularly important to see ostrich.

Dida Hara site:-This section of the park includes the following small sites. These are Ange class (it found around 42-44 kilometers from Yabello town, it is very difficult to reach that place), Tabe class (its distance is around 50-53 kilo meter from Yabello town), Dida Tuyura class (it found 17 kilo meters from Yabello town), Arbobo class (12 kilo meter from Dida Tuyura site which means 29 kilomers from Yabello town). It has also includes Buya site (found around 27 kilo meters from Yabello town), Tula Wayu site (found 20 kilometers from Serupa town and 55 kilometres from Yabello town), Danbala Abachena (found 30 kilometers from Yabello) and Dharito found 20 kilometers from Yabello kela or 23 kilometers from Yabello town) specific sites. It is called as the former wild life sanctuary of Yabello. This site is my focus of the study.

For more clarification we can see the following map of the former Yabello wildlife sanctuary (recent Dida Hara conservation site and the focus of this study)
2.2. Data Source and Methods of Data Collection

The data for this study was collected from both primary and secondary source of data. The secondary data was collected from published and unpublished sources. The secondary sources was collected from the park information center, Yabello town administration office, Yabelo town culture and tourism office, selected tour guide and tour operators leaflets in Addis Ababa.

Primary data was collected though the following methods.

2.2.1. Observation

To get the reliable information and what challenges faced the site, field observation was employed as one form of data collection method. Procedurally, the data collection process was handled in the field by the field guider and by the researcher observation. Geographical mapping of the study location was done in order to mark direction of the field work. In the field, the first task of the researcher is selecting a field guider by the assistance of culture and tourism office of the town and the park warden by considering the language knowledge of Afan Oromo language and Amharic, geographical situation of the area and some academic background.

2.2.2. Interview

The interview was conducted with the key office personnel’s in the culture and tourism office of the Woreda and town of Yabello, Yabello town administration officer, Park wardens, selected tour guides and operators in Addis Ababa to understand their plan, to identify the opportunities and challenges and what will be done in the future for the development of ecotourism in the park.

2.2.3. Focus group meeting
In order to identify the community assets, management strategies; community assessment method was used with interview and focus group meeting data gathering tools. Participants of the focus group meeting were including community leaders, local business people who engage in the business around the park, park warden. With these stakeholders a total of 4 focus group meeting was held. The participant of the focus group meeting was selected purposely by considering their knowledge about the local area resources, based on the recommendation from the culture and tourism office of Yabello town.

2.3. Sampling Strategy

Purposive sampling strategy was used to get a sample from the local community, tour operators and key office personnel’s. To select the tour operators and tour guides purposive sampling technique was used. The researcher purposely selects the tour operators and tour guides from Addis Ababa by visiting their web page/site by considering their itinerary, which include the Borena national park. At the same time, the samples from the local community will be selected purposively. Based on the purposeful selection method a total of 27 interviewees were contacted from the local community, culture and tourism head officers, tour guides and tour operators, park wardens.

3. Results and discussion

3.1. Opportunities for Ecotourism Development in Dida Hara Conservation Site

This study identifies the challenges and opportunities for ecotourism development in Dida Hara conservation site. The interviewed local communities, key office personals, personal observation by the researcher and selected tour operators identified the great headache for ecotourism development as well as the best opportunities in the national park. However before seeing the major challenges of park site for the ecotourism development, the researcher presents the major opportunities for ecotourism development in this site.

3.1.1. The Country Image as the Developing Country

For a long period of time, Ethiopia considered as the country of drought and famine. These past images of the country are also considered as a bad news and have its own impact on the country image. However, in recent time Ethiopian government and the Ethiopian Diasporas working towards the bad image of Ethiopia. Because of the changing image and the country’s continuous economic growth the world populations want to know more about Ethiopia. Due to these and other changing paradigm of the country tourism industry also increased in alarming rate. In return these external opportunities are give the way for the development of tourism in this destination, Dida Hara conservation site. By understanding these opportunities the number of visitors increased from time to time from abroad and domestically. This growing interests and numbers of visitors have big opportunities for the development of tourism in different destinations of Ethiopia in general and Dida Hara conservation site in particular.

3.1.2. The Government Emphases for Tourism Sector Development

For a long period of time tourism industry and its impact on the economy, natural environment and social life of the country has been neglected. This over all negligence of the industry long time results the
underdevelopment of diversified natural, cultural and historical tourism resources and the largest number
of world heritage sites in Africa receives only about half a million tourists per year put Ethiopia as the
lowest record of tourist recipient country in Africa. However, recently Ethiopian government at federal,
regional, and local level is giving due emphasis for the tourism development in all type.

In addition to these, the government of Ethiopia has been considering tourism as poverty alleviation
devises and put it in the Growth and Transformation Plan. In order to strength the tourism sector by the
beginning of 2014, the Federal Democratic Government of Ethiopia established two organs, the Tourism
Transformation Council and the Ethiopian Tourism Organization. The former provides leadership and set
guidelines for the country’s tourism marketing initiatives while the later serves as a secretariat for the
former. These two new offices are tasked to transform the industry as the country aims to earn around
US$150 million in 2014/15 from the sector. In the same manner, the Ministry of Culture and Tourism has
a vision to make Ethiopia one of the top five tourist destinations by 2020 (Elias Kebede, 2014). In general
the overall responsibility of these winds of the government are promoting tourism resources of Ethiopia,
ensuring the standardization of tourism services in terms of quality and variety in different destinations,
optimization of the impacts of tourism on the country’s economy so as to contribute for the alleviation of
poverty. This will have its own direct and indirect impact on the ecotourism development of the study
area, Dida Hara conservation site. Besides these general emphases from the center, the government gives
good attention for the development and advancement of potential tourism destination especially the
southern part of the country, most suitable part of the country for ecotourism development. As explained
in the Tourism development Policy of Ethiopia which issued in 2009; identification and development of
new tourism destination throughout the country will be one of the policy directions.

3.1.3. Growing Awareness Level of Local Communities Towards Tourism Development

As indicated by one of the interviewed respondent, In addition to some farming, natural resources
exploitation and majorly animal raring, because of different awareness campaign by the government of
Ethiopia at all levels through television, radio, public meetings and sometimes awareness creation tailored
meetings with communities living adjacent to the parks sites and other tourist destination areas, the
awareness level of local communities about tourism development increasing level. More importantly
communities are positive and show some commitment to participate in tourism development and
biodiversity. However, it needs more work for the future to raising and building capacity for the local
communities by different concerned stakeholders such as the park management, Bule Hora University,
Oromia Forest and Wild Life Enterprise, NGOs, etc.

3.1.4. The Presence of Bule Hora University

The culture and tourism office, Oromia Forest and wild life enterprise office of Borena zone are more
enthusiastic by the presence of the university because they pointed out that the university may considered
as a marketing and promotion weapon as well as the center of research for the development of the park.

3.1.5. Geographic proximity with Kenya

The geographical proximity with Kenya country has a fervent opportunity for ecotourism development of
the site in different ways. The first thing is, if Ethiopia worked towards the conservation of the site the
wildlife’s and other ecotourism products migrated to Ethiopia and considered as the major tourism resources and also it creates the site as a competitive destination with that of Kenyan ecotourism destination, a country well known by ecotourism destination especially wild life viewing.

3.1.6. Ecotourism Demand (Internationally and Domestically)

The report of World Tourism Organization (UNWTO) indicated that, the development of ecotourism is unparallel because of its effort for environmental conservation and local community benefit. In Ethiopian context, the government of Ethiopia and wild life conservation authority work towards for the development of ecotourism in community based way. Therefore the increasing demand of ecotourism development internationally and nationally has a marvelous opportunity for future development of ecotourism development in this ecotourism potential site.

3.1.7. Rich Ecotourism Resources

Being endowed with rich biological, natural and cultural resources, the study area has a huge potential for ecotourism development. The park sites are endowed with more than 280 bird species. Among these species four (4) are Endemic and endangered and more than 40 mammal species with the more undiscovered resources. Culturally the local communities have also rich with indigenous knowledge and cultural practices and have a value to be important ecotourism resources.

3.1.8. Growing Infrastructural and Facilities Development

Interview was conducted with the head of Culture and Tourism Office, Oromia Forest and Wild Life enterprise regarding to the infrastructure and facilities establishment in the study area. Those interviewed personnel’s confirmed that with the challenges of establishing lodges within the site and trail routs there is some effort to develop the park infrastructure by Oromia Regional State. The Regional State worked towards the development of infrastructure in the three National Parks of the region i.e. Borena National Park, Datie Wollele National Park and Arsi Bale National Park. Besides the regional state effort there is a growing private investment in Hotel and Pension construction in Yabello town. Therefore, the increasing interests of Oromia Regional State and investors to establish different facilities, infrastructures, hotels and pensions could be an opportunity for the development of ecotourism in the site.

3.1.9. Ethiopia Kenya Power System Interconnection Project

It was the bilateral agreement sign between Ethiopia and Kenya to work cooperatively towards power generation, transmission and rural electrification on May 7, 2006. The feasibility study completed in 2009 and actually operated since then from Wolayaita Sodo of Ethiopia and Suswa in Kenya stretched 1045 kilometers (433 kilo meter within Ethiopia and 612 kilo meter within Kenya). This power system interconnection has a positive outcome for the places that passed through including Yabello Woreda (Ethiopia Kenya Power System Interconnection Project, 2011). However, it is known that any development projects have some negative impact on the biodiversity and distraction of species which live within the protected areas. Therefore, the project needs to consider the possible negative impact on this site and increase the positive impact by being responsible investor.

3.2. Challenges for Ecotourism Development in the Site
The interviewees pointed out a lot of challenges for ecotourism development within the site. The researcher summarizes these challenges and describes them accordingly.

3.2.1. Increase in Human-Wildlife/plants use Conflicts

As the interviewed respondents indicated that, while they are almost the majority of the local communities are depended on the pastoralism and agro-pastoralism economic activity to support their livelihood, they have a conflicting interest on the natural resources. Therefore to support their daily live the local community encroach the park. Due to this the local communities and the wildlife’s are in conflict. This is also another bottleneck for ecotourism development and management within the destination. The research conducted by Chane and Yohannes (2014) also shows the presence of this challenge is one of the impeding factors for biodiversity conservation and ecotourism development within the site. Thus, for the development of ecotourism in this destination this challenge will continue unless it minimized through awareness creation, partnership and cooperation, diversification of livelihood option of the local as well as other different mechanisms.

Beyond the capacity of the Culture and tourism office as well as beyond the local community’s effort there is also one great challenge in the park destination i.e. the presence of animal ranch with in the park at Dida Tuyura site. The ranch was established in order to breed the animal of pastoralists as a role model long before the establishment of the park. As one of the head office interviewee indicated that, the presence of the ranch creates a strong conflict of interest between the wildlife and animals especially for fodder. He added that, basically it is legally prohibited to reside within and graze the nationally register park but it is impossible for us to overcome this problem through allocation, reallocation the ranch from the park… it needs the central government intervention and we are also silent for that.

The human and plants use also in conflict. As found from the interview the local communities sometimes led their life by using the direct plant products like charcoal and fire wood. Because of this need the local communities’ cut down the trees and use the resources as the direct home use and for selling in the market for their livelihood purpose. As one employee of the culture and tourism office of the Woreda pointed out, we all buy charcoal from the local communities for our home use…to reduce this challenge of environmental distraction we work on towards awareness creation program towards the importance of environmental conservation work…. even it is important to prohibit to buy the forest products from the local to stop the cutting of trees. As he explained this may take long times and strong commitment from the local up to the central government even from the buying communities like me he said. Therefore, it is mandatory to conserve the environment for the future development of the ecotourism in the destination and the total conservation of the natural environment. We can see the figure below to see how much the natural environment is distracted for different purpose by the local communities. It may need an immediate action from the concerned stakeholders.
3.2.2. Lack of Marketing and Promotion

By its nature tourism is a competitive industry. Therefore it requires a better organized and planned marketing strategy to win. But, for Dida Hara conservation site the issue of marketing and promotion is almost non-existence and create a great hindrance for ecotourism development in the park. All the respondents are totally shared the lack or even the total absence of promotional work for the development of ecotourism in the sites.
3.2.3. Limited Value Creation and Product Diversification

Even the destination is rich in both natural and cultural products; there is a limited product diversification and value creation to the visitors for satisfaction and learning experiences. This is also determining the length of stay of the visitors.

3.2.4. Inadequate Infrastructural Stock

Besides the tourism products/resources, accommodation facilities/hospitality industry; infrastructure and facilities are the major ingredient for ecotourism development for one destination. The implementation of successful ecotourism depends on the presence of various infrastructural stock including transport system, peace and security, telecommunication and others. For Dida Hara conservation site, problem of infrastructure is the great obstacle for the ecotourism development especially water, sanitation, power, telecommunication and absence of air transport are sauer problems for ecotourism development in the
study area. The problem is not only quantity but also a quality issue. This constraint is more severe for ecotourism destinations development of Dida Hara conservation site. Even few existing infrastructures are usually deteriorated and in most cases near collapse. As one tour operator explained that “due to the lack of road access within the site, all most the majority of the site products are inaccessible and extremely difficult for us to promote and include the site in our itinerary plan” (Interview, February 22, 2016). The interviewee added that “because of the total absence of water provision, sanitary condition and telecommunication in the extreme point of the site even in the entrance we cannot take our customers to the extreme point to explore more … because of these challenges the other challenges also emanated i.e. the issues of safety and security”

3.2.5. Limited Skilled Labor to Manage Ecotourism in the Destination

The first need for ecotourism development for one destination is specific professional specialization that will help for the adaptation of local skills, culture and natural resources to the construction and supply of tourism resources and products. As a matter of fact, the unique and single distinguishing characteristics of ecotourism from other form of tourism is; its emphases on the educational experience enjoyed by the customers. The educational experience for ecotourism is also delivered by skilled personnel within the industry (Scheyens, 1999). However the issue of skilled human labor is in contrary with this fact in the case of Dida Hara site. As found from the interview the major bottleneck for the development of ecotourism within this site is unskilled human labor to manage ecotourism in the destination. As one interviewee pointed and explained that “knowledge about the tourism development by all the stakeholders is important for the development of ecotourism with common objective … but in our case many employees had not sufficient skill and knowledge in the profession of ecotourism” (interview, February 14, 2016). Another interviewee added that “…to be tell you frankly in our town and the surrounding there are a lot of NGOs with some training and capacity building program especially in wildlife management and natural resource conservation… but they had do nothing for tourism development…even in their capability building program in the areas of natural resource conservation and wild life management; they have limited support and commitment to interconnect the programs…these and other lack of capacity building program by the concerned stakeholders exacerbated the problem of limited work force for the development of ecotourism” (interview, February 14, 2016).

The challenge of limited skill labor is not confined in the office but also it is a great problem in the hotels, pensions and restaurants in the town. It is obvious that service delivering sectors especially the hospitality establishments are the vital component of ecotourism development. Because of this significance, there is some hospitality establishments are found Yabello town. However, they faced challenges and skilled human labor to deliver the service. As one interviewee explained that “if we think rationally, our hospitality establishments worker join the industry without any skill and customer handling techniques and even have no skill of communications during the serviced delivery…”. “As a matter of chance, because of the absence of eco lodges in the site of the park the guests rest in Yabello town and always complain about the service and the skill of the employees” as one interviewee added.

Because of the lack of skilled human labor force visitor management system also emerged as the one challenge. As one office head in the culture and tourism office explained that “even the number of visitor
of our sites is small but the improper and management skill challenges the sites environment is destructed because there is no small negative impact every small ecotourism practices cause a negative impact”.

3.2.6. Limited Partnership and Cooperation among Different Stakeholders

Almost every interviewed respondent noted there is a limited effort of forming partnership and cooperation for the development of ecotourism and resources conservation. Similarly, they noted that the great significance of involving and cooperating for ecotourism development through promoting the balanced objectives and the achievement of objectives through the utilizing of varied skills. Beyond the challenges of partnership and cooperation sometimes there is also an overlapping role of different managing authority also happened. Therefore, by understanding the significance of forming partnership and cooperation among different stakeholders it is recommended to form public-private partnership for effective and efficient development of ecotourism in the study area. The cooperation and partnership problem is also seen from the federal, regional culture and tourism office. For example, when we search Borena national park from internet we cannot get any information. Culture and tourism minister know and call Dida Hara conservation site. At the same time, Ethiopian Wild life Authority not aware on the changed name of Borena National park. All these Authorities including the academicians have no information only Oromia Regional State forest and wild life enterprise call it as Borena National Park.

3.2.7. Lack of Researching and Resource Inventory

As found from the interview, the resources and tourism products of the study area are not almost researched and indentified with their explanation for the heritage conservation and tourism development. If the heritage resources are not interpreted and identified in a deep and explanatory way it is very difficult for ecotourism development.

3.3. Strategies for Developing Ecotourism in Dida Hara Conservation Site

For any development of business strategy, the ideas and the contribution of stakeholders has a great value. In more recent development paradigm the local communities propose their own strategy and give license to operate a business (Velentzas and Bron, 2010). Therefore, the researcher was collect and uses the word, strategy and possible action that were forwarded by the respondents as strategic framework for this research. To develop and identify different strategies and possible suggestion from different stakeholders for what will be done in the future varieties of strategies were identified from focus group discussions, interview with the local communities and the key office personnel’s. The researcher presents these future strategies for ecotourism development.

3.3.1. Natural and Cultural Resource Management

In recent time ecotourism used for the conservation and enhancement of natural resources because the basic rationally behind ecotourism development is conservation of natural resources and generating benefit from such resources. Almost 90 % of the ecotourism products of Dida Hara conservation site are natural resources; therefore it is mandatory to manage these natural resources in the sustainable manner. The following necessary actions are forwarded by the respondents for the implementation of natural and cultural resource management.
Necessary actions:

- Develop and facilitate collaboration and partnership with all stakeholders to maintain monitoring and controlling illegal activities towards the natural resources.
- Identify the weaknesses and strengths of the local community towards natural resource conservation and working towards the weakness and further strength the strengths.
- Develop information dissemination activities on natural resources conservation to all stakeholders especial for the local communities.
- Develop the awareness level of the local communities and support with rule and regulation.
- In line with biodiversity conservation in the site, it is mandatory to survey all the cultural resources which are practiced and produced by the local community because these resources are the sources of community proud for maintaining their tradition, indigenous knowledge and art, especially Gada system.
- Develop a discussion forum with the local communities to develop the cultural resources for ecotourism development support. It will be conducted by the Culture and tourism office of the town, the Wordas and the Zone.

3.3.2. Networking

For the successful development of ecotourism; networking with other destinations, which are found around the destination is crucial strategy. By understanding the problem of cooperation and networking of Dida Hara conservation site with other destinations, the researcher and the participants forwarded a strategy of networking with the nearby tourism sites of Konso, Arbamich and its rich national parks, Bale national park and other developed and developing ecotourism sites. Since these destinations are geographically connected with Dida Hara conservation site, they will be a new potential market sources for Dida Hara conservation site. Basically, the main objective of ecotourism development for the tourism destination is conserving the natural and cultural environments with more benefit to the local through prolonging the length of stay of the visitors and learning experiences. Therefore, to achieve this wind of change for ecotourism development creating network with others destination is the best strategy. The following necessary actions are identified by the respondents that will be important issues for networking strategy.

Necessary actions:

- Information exchange with the nearby destination through leaflets, telephone and experience sharing training
- Establishing internal relation office in the Culture and tourism office which working toward networking practice

3.3.3. Enforcement

Enforcement will be an important strategy for ecotourism development in the site. The enforcement will important for the cooperation and enforcement of the rule and regulation for better achievement by the highest authority. The following necessary actions will be important for the enforcements strategy which
outlined by the respondents.

- Establish clear boundary demarcation of the site.
- Enforce the government institutions and the local communities on boundary demarcation regulations by the central and regional state culture and tourism office, environment conservation authority.
- Develop a program for monitoring and reporting procedures and set a roles and responsibilities of key stakeholders and support with necessary action of power enforcement.

3.3.4. Financial support

As identified by the key office personnel’s, finance/ lack of finance is one of the challenge for ecotourism development in the park especially for constructing walking track, tourist information centre and other necessary facilities and infrastructures, giving training. Therefore in order to illuminate these challenges, the following action of strategies was forwarded. Develop proposal for funding agencies and Non Governmental Organization for financial support for ecotourism development facilities and infrastructures by culture and tourism office of the Town, Woreda and the Zone.

3.3.5. Ecotourism Marketing and Promotion

As indicated above in competitors section of this paper, the basic thing for the development of ecotourism in Dida Hara conservation site of Borena Park is marketing and promotional work. Therefore, by taking in to account the products and experiences of its competitors, it will be important to promote and market Dida Hara conservation site. On the other hand it is also important to know rather directly competing with already developed ecotourism destinations, Dida Hara conservation site should complement the current situation by providing unique and different experience to those destinations. In order to market and promote Dida Hara conservation site the visitors survey result need to be considered to understand the interest and motivation of the visitors. Therefore, based on the market demand analysis result, interview and focus group meeting information for marketing tool the following necessary actions are forwarded and suggested. Recognize the key role of private sector businesses. As it indicated above ecotourism is/will not be develop without cooperation and partnership with different stakeholders. Fostering and working with private sector operations, encouraging and helping them to meet a combination of commercial, social and environmental objectives, has proved to be a sound strategy. Park web pages and Social media, Face book and other social media are also needed. Branding the destination also strongly needed to develop the unique characteristics of the destination. These initiatives organized by the culture and tourism office/ Oromia forest and wild life enterprise. It is important to strengthen links between private operators and local communities.

3.3.6. Education and Capacity Building/Human Resource Development

As a matter of fact, ecotourism will not be successful without effective management (Boo, 1993). Therefore, adequate institutional arrangements and administrative commitments are necessary for effective management. And, Capacity building programs are very also necessary tool for effective and efficient management of ecotourism development. For this matter the following specific actions will be important tools.
Necessary Actions:

- Awareness raising program on ecotourism and conservation of both nature and cultures are given for the local community and office personnel’s.
- Conduct regular meeting with different stakeholders to disseminate information’s about ecotourism impact, concept of supply and demand factors affecting future success and significances.
- Work towards and assist development agencies and bureaus including trade and commerce office to integrate ecotourism as one part of their plan.
- Produce educational tools on natural resource management around the park.
- Awareness raising program to the local community concerning on the importance of protection and conservation of the site resources.
- Hospitality industry owners and employees will get training in the concern of hygiene and sanitation, necessary language, customer handling technique and others service management concepts.

3.3.7. Zoning of the Park Areas

In tourism sense, zoning is the division of a site into a number of different sectors, or zones, for the purpose of distributing different types of use or non-use (i.e., protection) in the most appropriate places (Fennell, 2003). Therefore, based on the researcher observation and suggestion from the interviewed respondents, the researcher develops the necessary action of zoning in the following manner.

Necessary Actions:
Identify and survey the sites in order to determine the management objectives and prioritize the objectives by culture and tourism office in collaboration with the concerned researchers, geographers, Geographic Information System (GIS) experts, ecotourism development consultants, local community members, NGOs and environmentalist is needed. Based on the survey result quality and variety of the natural and cultural resources degree of alteration they have suffered; and the types of use that have been planned and separated geographically. Under this action the following specific actions are forwarded by the respondents and the researcher:

- The abundance and density of unique, endangered, endemic species that may be important for the zone should be noted.
- Evidence of human impact will be identified.
- The scenic beauty of each zone will be noted.
- The distance for human habitation and park area will be identified.
- The sorts of human mobility within the zones will be marked.
- The kind of norms which is important for the zone management and the visitors will be noted and for warded for the visitors as well as for the management office.
- The type of equipments, degree of autonomy for the visitors, kind of infrastructures and facilities development will be permitted and any other administrative issues will be developed.

3.3.8. Organizing Naturalist Guide
As found from interview with the tour operators and key office personnel’s and some visitors comment; there is a lack of naturalist guide in the park to interpret natural and cultural tourism resources for the visitors. To make ecotourism is effective in the destination; naturalist local guides are the heart of development. Therefore, the following strategic actions are forwarded to organize the local naturalist guides.

Necessary Actions:

- Detail explanations of the resources and tourism products of the park will be clearly written and organized. It may incorporate information and orientation about the resources and products, rules and regulations, special activities within the park, local flora and fauna types, ecological processes the resources, management issues (how they are managed, the level of alteration..) and the cultural historic evolution of the area in short.
- Interpretive material should be easily accessible for the visitors as well as may found in the offices of the town, it is must the information is accurate and encourage responsible behavior and an ongoing interest in the environment and conservation after the visit.
- The existed few “naturalist guide” and experts will get training.
- The local naturalist guide monitor and interpret the resources and products for the visitor.
- The naturalist guide will work within the park office regularly and have update information.
- Need to know the current scenario of travel industry and the need of travelers from different corner of the world.

3.3.9. Preparation of Trail Routs, Signpost and Camping Sites in the Destination

Besides their power as a marketing and information tools preparation and nailing/posting signs in the park area is important to manage visitors. As indicated above the total absence of trial routs, camping sites and unrepresentative sign post create a spoiled image for the destination. Because of the following necessary actions are forwarded by the culture and tourism office experts and tour operators

- Satellite based camp sites developments will be needed
- Identification and developing of a road network inside the park will be developed
- Trail creation, signage and naming with new campsite will clearly stated
- Development of off-road spots for viewing wildlife
- Establish and put clear sign post at the entrance of the destination and in some important view points.

4. Conclusion and Recommendations

4.1. Conclusion

This study describes the opportunities, challenges and the prospects for ecotourism development in the destination of Dida Hara conservation site of Borena National Park, Oromia Regional State, Ethiopia. Interview and focus group discussion was conducted with tour operators, travel agents, local community representatives and key office personnel’s to further identify challenges and how to do ecotourism in the destination for the future development. The result obtained from these methods affirmed that the local
communities possess huge cultural ecotourism resources and the local community has a proud to show these resources for the visitors and have a potential to conserve the natural and cultural tourism resources. More importantly, besides the resources power to attract the ecotourists the resources have a potential to bring different stakeholders together for the nature and culture conservation.

The major challenges which listed out by the interviewees and focus group discussants and identified by the researcher personal observation and document analysis are; increase in human-wildlife conflicts, lack of marketing and promotion, limited value creation and product diversification, inadequate infrastructural stock, limited Skilled labor to manage ecotourism, limited partnership and cooperation among different stakeholders, lack of researching and resource inventory, absence of signpost, trial routs and walking tracks. Besides these challenges for ecotourism development, the best opportunities for ecotourism development in the destination are also listed out by the interviewees and focus group discussants. Among these opportunities image of Ethiopia as a developing Country, the government emphases for tourism sector development, growing awareness level of local communities towards tourism development and conservation of resources, the presence of Bule Hora University, geographic proximity with Kenya, ecotourism demand (Internationally and Domestically), rich ecotourism resources, growing infrastructural and facilities development and Ethiopia Kenya Power System Interconnection Project are the major one.

For the future operation of the destination as a major ecotourism destination; focus group discussants, interview participants and personal observation showed the direction by indicating the necessary strategies and actions. Among these the following are presented; natural and cultural resource management, networking, enforcement, financial support, ecotourism marketing and promotion, education and capacity building/human resource development, zoning of the park areas, organizing naturalist guide, preparation of trail routs, signpost and camping sites in the destination.

4.2. Recommendations

- To develop the site and the resources as the splendid ecotourism destination local guide with best interpretation especially to the plants, animals and local culture strongly needed and should be fulfilled.
- Financial resources need for the provision of food and drinking service to the visitors, training will be required in food preparation, language, first aid and wildlife and vegetation knowledge and guiding.
- For the sustainability ecotourism development, potential impacts including the disturbance of wild lives (human wild life conflict), pollution, fire and natural resources distraction and species declining should be controlled and minimized.
- As it found from the local communities, observation and interview with the key office personnel’s, the local communities livelihood depend on majorly on livestock breeding and almost depended on the natural resources of the area. Therefore, there is a possibility of an increasing natural resources distraction and human wild life conflict. Thus, it should be to balance the livelihood and the natural resource through income diversification of the local community, visitor management system and preparing management plan for the site.
In order to increase the length of the stay of the visitors and satisfy their needs and wants product development within the site should be implemented.

The map of the area, which delineating the trek and point of interest, resting areas, lodging location, view points for the facilitation of visitors will need to be build in organized way.

Marketing and promotional work should be used as an important instrument for the development of ecotourism within the destination through different media including leaflets, electronic Medias. As a marketing and promotional tools branding, opening web page and face book address of the destination should be implemented and update the information’s regularly.

Strong partnership and cooperation work need to be improved with different stakeholders (local community, Zonal offices, Woreda Offices, Regional State bureau, with the competing destination, NGO and etc).

Regular and continuous Research should be developed

Finally, it is strongly recommend that the strategies and necessary actions that roses by the research work participants and identified by the researcher observational work are respected and put in to action and implementation for the development of ecotourism in the Dida Hara destination.

References


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