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## **Competency development through innovative Training methods: An empirical study on Entrepreneurship Development Courses.**

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### **1. INTRODUCTION:**

In tune to the aims and the objectives of the Govt. Of India, to meet to the national objective of 'social and economical justice', the government has a policy regarding the entrepreneurship oriented vocational education on the national platform keeping an eye on Entrepreneurship development in the all regions of the country.

Since entrepreneurship and Self Employment is one of the best means of Socio economic development, the govt has planned a country wide policy of providing training to the people so as to empower them through Self Employment. The aims and the objectives of the policy are<sup>1</sup>

- The principle aim of vocational education is to prepare the students for seeking of self employment.
- Skill development should be the prime aim for developing the students to be an entrepreneur.
- The courses designed to achieve these aim should be more of practical oriented than to conventional theory oriented education.
- Proper weightage should be on rural development through employment generation to the masses.
- The structure of the courses should be flexible enough for the implementation purposes.

- The vocational schemes should reduce the quantum of the unemployed educated youth in the country.

Considering the power within the education system the scheme has some advantages especially in relation to the rural part of the country. These can be viewed as strengths that can be encashed on the entrepreneurial grounds.

### **2. FEATURES OF RURAL ENTREPRENEURSHIP**

The rural part of India is most suitable to place the Tiny and Cottage industry in or around the rural part of the country. Since the volume of the business is small it needs a small amount not only to establish a business but also to manage it. Hence the rural area has ample potential for the low investment based enterprises<sup>2</sup>.

1. Tiny and Cottage Industry
2. Low investment
3. Lesser Overheads
4. Lesser Manpower needs
5. Lesser Technological Implications
6. Competency sensitive business

Of course, to achieve the goals one must be empowered through rigours efforts in the direction of entrepreneurial development education. The competency building exercise is needed to be implied deliberately in line of three basic factors.

Requirements of Competency development:

1. Knowledge:
2. Skill:
3. Confidence:

### **3. OBJECTIVES OF THE STUDY:**

The study is of empirical nature and aimed at following principle objectives-

1. To study the effects of the training on the skill improvement of the trainees in terms of the Entrepreneurship developmental aspects.
2. To assess the performance of the training methods that are designed to impart the technical skills among the undergoing trainees.
3. To suggest the strategy of training for the entrepreneurship development program planning and implantation.

### **4. HYPOTHESIS:**

To achieve the objectives through the research, following hypothesis were made as assumptions-

1. (H0 1) Training plays a significant role in skill development of the trainees as they undergo repeated iterations of the same experiment that enhances their skill i.e. "Practice improves the Skill" of entrepreneurship.
2. ( H0 2) Skill plays a significant role in 'Confidence Building' among the trainees i.e Skill improves performance and performance improves Confidence.
3. ( H0 3) Confidence plays a significant role in the development

of the Entrepreneurship in the trainees.

### **5. METHODOLOGY:**

To carry out the study is of the empirical nature, experimental method followed by the observation, data collection, tabulation and analysis is adopted as a scientific pattern of the research.

During the research process following procedure is followed

1. A reputed training institute is selected as a place of research where all standard training and evaluation facilities are available as well as students from all parts of social and economical background are imparting to the training.
2. The study is sharply focused on the 'Engineering and Technology' group courses of versatile entrepreneurship avenues such as Building Maintenance, electronic Technology and Maintenance of Electrical Domestic Appliances.
3. The intake capacity for each of the course is same i.e 20 as well as the training scheme is also standard as per the technical education norms. Care is also taken to choose the place with adequate infrastructure needed to impart the skill to the students.
4. The Trainers and the resource persons are with uniform qualifications, experience and expertise as per the standard norms of the technical education in Maharashtra State.
5. The period of the evaluation of the performance is of five years i.e from the year 2000 to 2005.

## 6. CRITERION STANDARDS FOR CARRYING THE EXPERIMENTS FOR THE RESEARCH

1. Design of the standard experiment and choice of the suitable experiment to be undertaken as a measure of evaluation of the performance verification of the hypothesis.
2. Method of training and the duration of the experiment was set as a standard for each experiment independently.
3. Each experiment was carried out in the pre decided manner in the sequence of the activities and the time duration.
4. The performance after each iteration was measured and compared with different statistical methods and tools to verify the hypothesis made.

## 7. DATA COLLECTION

Following method is adopted for the data collection

To verify the Hypothesis related to the assumption that, ‘Multiple iterations of experiment improves skill and competency’, some experiments which are useful in regard to skill development are decided and the set experiments are used for the testing of the hypothesis.

The same group of student is used as a sample and the same student is allowed to undergo the same experiment performance again and again. The readings of their performance in terms of improvement of the skill (whether or not) is recorded in a table and further it is evaluated to verify the statement.

To test the hypothesis regarding the confidence building through the competency development exercise, the change in the student’s attitude, approach and confidence is assessed through observing the way they perform the job assigned to them.

The opinion of the students about their own performance are also studied for the verification. Some students are sampled from the lot and interviewed to judge their confidence level so as to become an entrepreneur<sup>4</sup>.

To evaluate the fact about the assumption that Entrepreneurs can be developed through training, the recorded data of the vocational department regarding the training and the schemes implemented for the last six years is used as a reference.

## 8. OBSERVATIONS

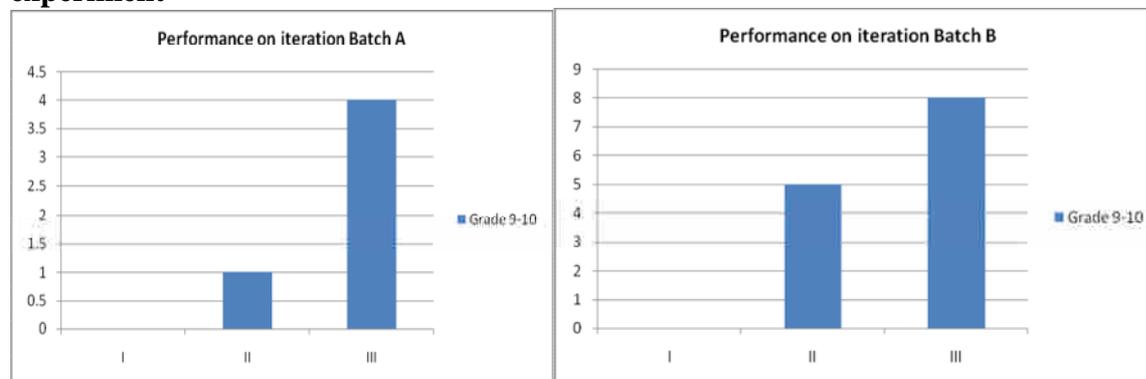
The table 1 and the graphs drawn for the Batch A and Batch B indicates that, the performance of the trainee increases as the iteration of the experiment increases. The Trainees have attended highest scale on the third iteration. Of course the performance is increasing from the first, second iteration and it has reached to the satisfactory level on the third iteration.

**Table 1 : DEVELOPMENT OF SKILLS THROUGH REPEATITION**

S.N.	ITERATION	BATCH	SIZE	GRADE ON SKILL DEVELOPED			
				1-4	5-6	7-8	9-10
1	I	A	20	15	3	2	0
2	II	A	20	12	4	3	1
3	III	A	20	4	6	6	4

4	I	B	20	16	2	2	0
5	II	B	20	10	2	3	5
6	III	B	20	3	4	5	8

**Graph 1: Performance of the Batch A and Batch B on multiple iterations of the experiment**



( Ref: Data from Table 1 )

The Table 2 indicates that the multiple iterations of the experiment gives the confidence to handle the complex problems as the skill is improved.

**Table 2: Observation on the performance and Confidence of the Trainees undergone**

S.N.	BATCH SIZE	PROBLEM COMPLEXITY	STUDENT'S APPROACH		
			Right.	Delayed	Poor
1	20	HIGH	12	6	2
2	20	MODERATE	15	4	1
3	15	HIGH	10	3	2
4	10	MODERATE	10	0	0
5	15	HIGH	9	5	1

( Source: Data from the Experiment result)

The following details of the data collected from the college record reveals that the Confidence plays a significant role in the development of the Entrepreneurship in the trainees as the number of employed and self employed students is more than 50% every year<sup>3</sup>.

**TABLE 3: Student's Performance for the PERIOD 2000 TO 2005**

S N	YE AR	B.M .	Em ploy ed	%	E.T.	Em ploy ed	%	M.R .E.D .A	Em plo yed	%	TOT AL	Total Emp loy ed	Perfor mance %
1	2000	24	18	75	22	14	63	20	17	85	66	49	74.24
2	2001	17	13	76	19	14	73	14	12	85	50	39	78.00
3	2002	18	13	72	19	12	63	16	12	75	57	37	57.3
4	2003	08	7	87	15	11	73	17	14	82	40	32	80.00
5	2004	15	12	80	18	15	83	19	14	73	52	41	78.88
6	2005	17	13	76	17	12	70	12	07	58	46	32	69.56

7	Total	99	76	76	110	78	70	78	76	76	287	230	72.99
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( Source: Students performance record of the SBES College of Science, Aurangabad)

**TABLE 4: STUDENTS IN SELF OR WAGE EMPLOYMENT DURING PERIOD 2000 TO 2005 .**

S.N.	YE AR	Course	SAM E FIEL D	ALLID E FIELD	DIFFERE NT FIELD	UNEM P LOYE D	TOTAL
1	2000	BM	10	6	2	6	24
2	2001	BM	6	4	3	4	17
3	2002	BM	7	2	4	5	18
4	2003	BM	5	2	0	1	8
5	2004	BM	4	3	5	3	15
6	2005	BM	7	3	3	4	17
	Total		39	20	17	23	99
7	2000	ET	6	2	6	8	22
8	2001	ET	4	6	4	5	19
9	2002	ET	8	4	0	7	19
10	2003	ET	6	2	3	4	15
11	2004	ET	7	3	5	3	18
12	2005	ET	2	4	6	5	17
	Total		33	21	24	32	110
13	2000	MRED A	10	5	2	3	20
14	2001	MRED A	8	4	0	2	14
15	2002	MRED A	6	4	2	4	16
16	2003	MRED A	6	3	5	3	17
17	2004	MRED A	9	2	3	5	19
18	2005	MRED A	7	0	0	5	12

	5	A					
	Total		46	18	12	22	98

( Source: Students performance record of the SBES College of Science, Aurangabad)

## 9. CONCLUSION:

According to the verification of the hypothesis **H0 1** it is proved that the training plays a significant role in skill development and thus, enhances their skill i.e. “Practice improves the Skill” of the trainee of the entrepreneurship oriented course.

The hypothesis made earlier **H0 2** regarding the issue of ‘PROPER TRAINING HELP DEVELOP CONFIDENCE’ Skill plays a significant role in ‘Confidence Building’ among the trainees i.e Skill improves performance and performance improves Confidence.

The hypothesis **H0 3** is also proved as the good number of the Entrepreneurship course trainees gained better skill, better confidence resulting in to their wish fulfilment regarding the entrepreneurship development.

Hence, it is needed to focus on the way the training is given to the trainees undergoing the entrepreneurship development courses for making the drive successful.

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## Supply Chain Management In Sugar industry: A Study of Western Maharashtra In India

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### *Abstract*

*Agro processing is a large sector that covers activities such as agriculture, horticulture, and plantation. It also includes other industries that use agriculture inputs for manufacturing of edible products. Sugar Industry is one such major player in Agro processing sector. Greater delegation and competitiveness in agro based industries require new forms of co-ordination between farmers and other agencies to increase quantity within catchment area. During the entire production season, to maximize sugar production with minimum overheads a good network of all the elements is required*

### **1. INTRODUCTION**

Sugar industry constitutes one of the most important agro based industries in India. It started growing in an organized way during the 1930 after introduction of sugar industry protection act in 1932. Sugar industry in India is well developed

with a consumer base of more than billions of people. It is also the second largest producer of sugar in the world. The Indian sugar industry has a turnover of Rs. 500 billion per annum and it contributes almost ` 22.5 billion

to be in place. Sugar industry faces a lot of problems such as lack of co ordination, interruptions in supply of raw material due to natural calamities and many other such problems. To overcome these problems industry needs to have a proper supply chain management. Sugar industry particularly in Maharashtra is very popular in the cooperative sector. It is contributing to nearly @ 40% of total national production of sugar. The tonnage figures are @ 50-70 lakh tons of sugar every year[2].

*Key Words-* Sugarcane, supply chain Management, sugar Industry, production,

to the central and state exchequer as tax cess and excise duty every year (ref: Ministry of food, Government of India report). Sugar industry directly provides employment to 45 million i.e. 7.5% of rural population engaged as sugarcane farmers, agriculture laborers and dependents. It also employs 0.5 million skilled and semi skilled workers. In aggregate employment generated by sugar industry is for more than Five million persons. It is considered as engine of rural development and socio economic upsurge. In the sugar industry management of supply chain is changing considerably in response to the often difficult

market environment. Market forces present real challenges to wholesalers and retailers but are exceptionally problematic for primary producers who often lack the knowledge to manage these new and dynamic relationships. Improving efficiency of supply chain is now become the need of the hour as this industry has to compete at international level. Although India's average farm size is smaller,

the industry maintains that smaller farmer is a valuable part of the grower base and will continue to be so into the immediate future. This characteristic underlies the importance of initiatives such as sharing of farm equipment and harvesting by grower owned cooperatives or partnerships as well as the need to support farmer's diversity of income sources[1][2].

### Supply Chain in Sugar Industries:

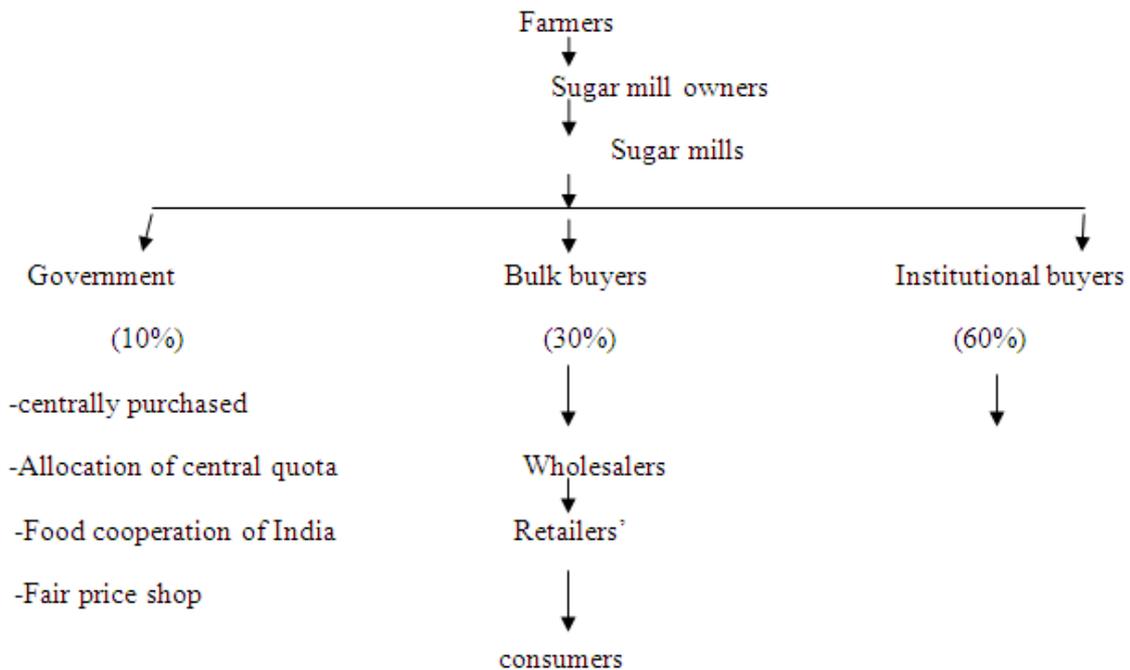


Fig. No. 1: Formal Supply Chain in Sugar Industry in general

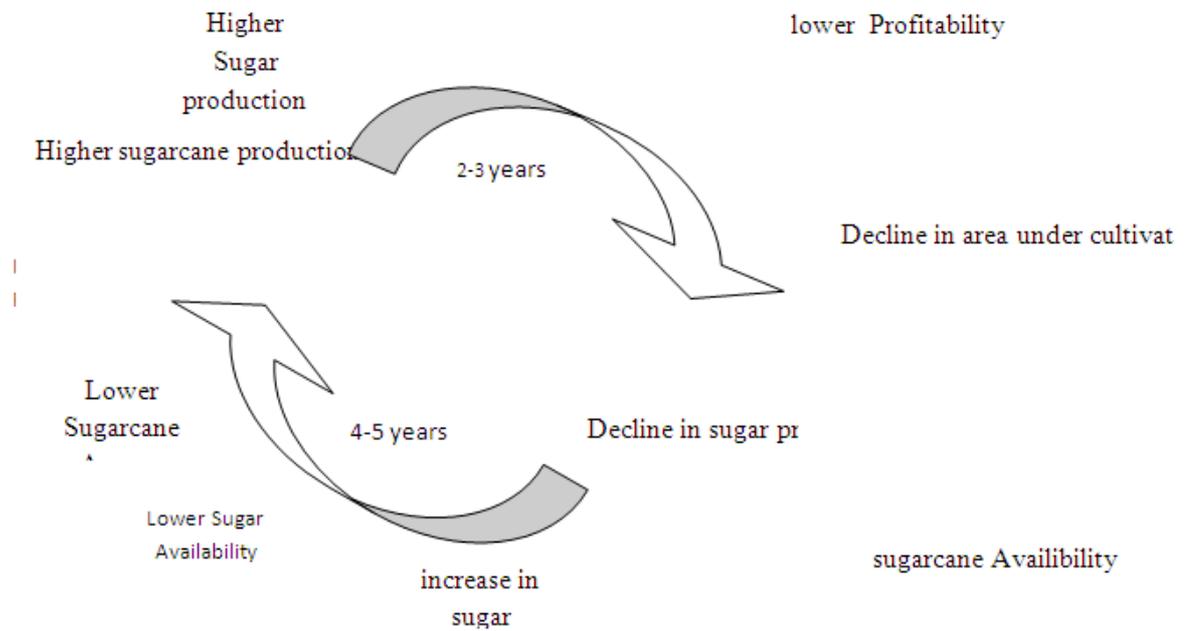


Fig. No. 2: Cycle of variation in Sugarcane production

**Product Flow—**

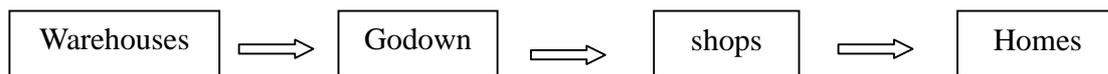


Fig. No. 3: Product flow diagram

Supply chain management in sugar industries involves a lot of problems which will in turn affect the production of sugar. The sugar industries in India use only sugarcane as input, hence sugarcane have been established in large sugarcane growing states like Uttar Pradesh, Maharashtra, Karnataka, Gujarat and Tamilnadu and Andhra Pradesh. These six states contribute more than 85% of total sugarcane production in India. Uttar Pradesh and Maharashtra together contribute more than 57% of total production[3].

Public: 06% of	Private: 54%	Cooperative: 40%
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### 3. MAJOR PROBLEMS IN SUPPLY CHAIN OF SUGAR INDUSTRIES- A) CANE PRODUCTION-

In the region, cost of production- including harvesting, infield haulage, road transport, loss of throughput can add to costs at every link in the supply chain value chain research provides some initiatives for reducing this cost and improving the efficiency of supply chain, like the implementation of GPS guidance system to assist tracking while harvesting, group farming, rationalization of harvesting group to reduce cost of growers, upgrading the website to facilitate the collection and analysis of data from farmers to assist with

## 2. FACTORS AFFECTING SUPPLY OF SUGARCANE

- Climate- Due to global warming there are frequent changes in the climate which in turn affect the yield and quality of sugarcane.
- Technical- Lack of technical knowledge among farmers regarding cultivation and harvesting of sugarcane
- Sugarcane production- When there is more production of sugarcane it will lead to more production of sugar and vice versa.
- Political factors- This is major factor affecting the supply of sugarcane as majority of sugarcane industries in western Maharashtra are dominated by politicians and the political battle strongly affect this industry.
- Recovery rate, Duration of season, sugarcane utilization for sugar production is also another factor that affects the supply of sugar[1].

### Structure of sugar industry in India-

agronomic and farm financial management decisions, regularly providing the latest updates of market and climatic changes as well as the best practices for improving sugarcane production to the farmers by conducting workshops and special training programme will also help to improve the production of sugarcane.

### **B) TRANSPORTATION-**

Sugarcane industries are mostly located in rural areas as sugarcane is the main raw material used for manufacturing of sugar so the sugar industries in order to reduce their transportation cost prefer to set up the industries near the of sugarcane production areas, but the main problem here arises is that improper road facilities. In absence of dynamic vehicle scheduling, a typical sugarcane transport system symptomatically exhibits excessive queuing times large number of no cane stops, significant over fleet and poor vehicle utilization, a high level of coordination is required between farmers, harvest contractors, transport contractors and mill managers to make sure the mill receives a steady stream of fresh cane. The development of larger cane bins and an efficient trapping system for the efficient transport of whole crop material will help to reduce the transportation cost to some extent.

### **C) WAREHOUSING-**

After manufacturing and before distribution the sugar is stored in warehouses which is also called as inventory, during this storage some problems may occur like sometimes due to moisture sugar get converted in solid cubes or may be spoiled due to improper handling. So proper care should be taken to maintain the inventory in good condition. To solve these problem industries should develop warehousing at consuming destinations this enables industries better pricing and eliminating too many middlemen, better Information Technology and application of quantitative tools and techniques can be used for inventory management.

## **4. GOVERNMENT POLICIES-**

Sugar has historically been classified as an essential commodity and has been regulated across the value chain. The heavy regulation in this sector artificially impacts the demand supply forces resulting in market imbalance. Sensing this problem, since 1993 the regulations have been progressively eased. The key regulatory milestones include de-licensing of the industry in 1998 and the removal of control on storage and distribution in 2002 .However, policy still plays an important role in industries. There are various legislations regarding sugarcane procurement, sugarcane pricing, sugar sales, capacity and production, import and export.

## **5. OTHER PROBLEMS-**

Mismanagement, lack of coordination between farmers, mill owners and distributors, lack of modern technologies as many of the industries still rely on old technologies are some problems which need to be corrected for improving the efficiency of supply chain

### **Problem of Farmers-**

- A marginal Indian farmer is faced with several challenges that result in yield and quality being inferior by world standards.
- He lacks access to information accurate weather forecasts and up to date information on commodity market prices.
- He lacks access to the market and thus caught in the vicious cycle of suboptimal use of farm inputs higher cost of credit and lower price realizations on his produce leading to indispensable income for him[1].

### **Solution for these problems-**

- Pre configured SAP solution
- Web based cane management system
- Add on utilities; smart card and SMS
- ASM clean development Mechanism

## **6. CONCLUSION-**

In the sugar industry management of supply chain is changing considerably in response to the often difficult market environment. Geographic Information System(GIS) and Global positioning system(GPS) are used extensively in location, site selection, land use planning, environment science, transportation system, trucking companies now track their tracks via GPS technology. In vehicle navigation system, vehicle location system, emergency vehicle deployment and traffic management are using GIS and GPS for their value chain. In addition to this effective communication throughout the world had had communicated virtual world of e business, e integration, e commerce, e marketing, e procurement. Modern sugar industries are required to adopt all these measures for improving the efficiency of their supply chain management.

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## Similarities and Differences Between Transformational and Servant Leaderships.

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### Abstract

*This study investigated the basic similarities and differences between transformational and servant leadership theories. Scholarly work on both transformational and servant leadership was intensively reviewed. After studying the relevant literature of both the paradigm we arrived at somewhat hybrid form of leadership having the characteristics of transformational and servant leadership. They both are highly influential, visionary, trustworthy, respectable, believe on delegation of responsibilities and empowerment of employees, serve as role models and are perfect models of integrity and honesty. The important point of variation of both leaders is their focus. Transformational leaders focus on organizational objectives whereas servant leaders are more concerned with the satisfaction of their followers' highest priority needs. In addition to focus difference they can also be differentiated on the basis of moral, focus, motive and mission, development and influence distinctions.*

### Introduction

Transformational and Servant leadership theories have been in existence since the late 1970s and it was the pioneering work of Graham (1991) which actually brought the theoretical assumptions regarding the distinction between these two popular leadership styles. Transformational leadership theory, introduced by seminal works of MacGregor Burns (1978) and Bernard M. Bass (1985a) has got optimum level of popularity in the present era. The theory is equally employed by both researchers and practitioners in different organizational setting since the last three decades.

Similarly Robert Greenleaf (1977) introduced the concept of Servant leadership, which caught considerable attention in the present leadership literature. A peripheral view of these two leadership styles leaves the perception that these two are most probably the same leadership styles. Transformational leaders' primary focus is on organizational objectives, they transform their employees to the efficient accomplishment of group /organizational goals; while Servant leaders care much for their followers, they try to make sure that the followers' highest priority needs are fulfilled (Greenleaf, 1977). Transformational leadership occurs when a leader inspires followers to share a vision, delegate authority for the accomplishment of that vision, and the necessary resources are provided for the development of their personal capacity. They are mobilizers of commitment and support optimism; serves as role models and have an eagle eye on the personal growth of their followers (Bass, 1996; Bass and Avolio, 1988, 1994a, 1994b).

Servant leadership theory views a leader as a servant of his/her followers. Followers' interests are of the primary importance for the leader as compare to their self-interest. They emphasized followers' empowerment and their personal development. Servant leaders act as a strong facilitator for followers in their accomplishment of a shared vision (Greenleaf, 1977; Spears,

1998; Luab, 1999). Purpose of this research is to examine the theoretical frameworks, attributes and focus of both leadership styles, to find out the similarities and differences between the two leadership styles.

### **Transformational Leadership**

Bass (1990b) stated that Transformational leadership “occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purpose and mission of the group and when they stir their employees to look beyond their own self-interest for the good of the group”. He further explained that transformational leader transcend beyond self-interest for the “group, organization or society”. Building commitment to the organizational objectives and empowering followers for the efficient accomplishment of those objectives is the essence of transformational leadership (Yulk, 1998). This leadership style is more concerned with progress and development of organizations and employees (Bass, 1990a). Transformational leaders pave the way for harmonious relationship within the organization and try to establish a climate of trust where vision can be shared by the whole members (Bass, 1985a). It is conceptualized that four primary behaviors constitute Transformational leadership (Avolio et al, 1991).

**(a) Charisma.** “The leader provides vision and a sense of mission; instills pride, faith and respect; excite, arouse and aspire their subordinates”.

**(b) Individual considerations.** “The leader provides coaching and teaching; delegates projects to stimulate learning experiences; provides for continuous feedback; and treats each follower as an individual”.

**(c) Intellectual stimulation.** “The leader provides subordinates with a flow of challenging new ideas; motivates followers to think in new ways; emphasizes problem solving and the use of reasoning before taking action”.

**(d) Inspirations.** “The leader acts as a model for subordinates; behaves in ways that motivate and inspire followers by providing meaning and challenge; communicates a vision”.

### **Servant Leadership**

Servant leadership has been a hot topic for research since the last three decades but the credit goes to Robert K. Greenleaf (1997), who coined the word “Servant leader” for the first time among modern organizational theorists. Greenleaf classical statement makes it affirmed that servant leaders are highly moral due to his/her sacrificial service and conscience. He said that “the servant leader is servant first. It begins with a natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead”. He made it clear that servant leaders are altruistic in nature and try to fulfill the highest priority needs of their followers. He added that servant leaders’ followers become healthier, wiser, freer, more autonomous and more likely to become servants themselves. It was also suggested by Greenleaf that servant leaders are mostly concerned with the up gradation of society.

They care much for the deprived people and play their role in the prosperity of society which is considered as their primary motivating factor. Russel and Stone (2002) are of the view that the prime objective of servant leader is to serve and meet the needs of followers, which they considered should be the primary motivating factor for leadership. Servant leaders support their followers to flourish and develop; they gain credibility and trust from their followers and articulate then a clear vision (McMinn, 2001; Farling et al, 1999). Greenleaf did not define servant leader, it was Sim (cited in Luab, 1999) who defined servant leader: “to honor the personal dignity and worth of all who are led and to evoke as much as possible their own innate creative power for leadership”. Luab summarized servant leadership in the following words

“servant leadership is an understanding and practice of leadership that places the good of those led over the self-interest of the leader Servant leadership promotes the valuing and development of people, the building of community, the practice of authenticity, the providing of leadership for the good of those led and the sharing of power and status for the common good of each individual, the total organization and those served by the organization”.

**Servant leadership attributes**

Greenleaf (1977) identified several other key characteristics of servant leaders. These include initiative, imagination, listening and understanding, the ability to withdraw, intuition, acceptance and empathy, foresight, awareness and perception, the ability to persuade, ability to conceptualize, healing and serving and the ability to build community. Several proponents of servant leadership have identified different combinations of attributes (Russel, 2001; Rinehart, 1998; Rardin, 2001; Pollard, 1996; Moon, 1999; Cooper and Trammell; Luab, 1999; Kiechel, 1992; Farling et al, 1999).

Patterson (2003) developed the new theory of servant leadership which paves a platform for more specific research by clarifying the values which are the building blocks of servant leadership construct. We first present Patterson definition of servant leadership then go for her attributes of servant leadership: “servant leaders are those who serve with a focus on the followers, whereby the followers are the primary concern and the organizational concerns are peripheral. The servant leader constructs are virtues, which are defined as the good moral quality in a person or the general quality of goodness, or moral excellence”.

Table 1 gives an overview of the definitions and attributes of servant leadership suggested by the renowned researchers of leadership.

**Definitions and attributes of Servant leadership.**

Spears (1995)	Russell (2001)	Russel and Stone (2002)		Patterson (2003)	Dennis and Bocarnea (2016)
		Functional attributes	Accompanying attributes		
Listening	Vision	Vision	Communication	Is visionary for the followers	Vision
Empathy	Credibility	Honesty	Credibility	Acts with humility	Humility
Healing	Trust	Trust	Delegation	Is trusting	Trust
Awareness	Service	Service	Competence	Is serving	
Persuasion	Modelling	Modelling	Stewardship		
Conceptualisation	Pioneering		Visibility		
Foresight	Appreciation of others	Appreciation of others	Influence	Is altruistic	
Stewardship	Empowerment	Empowerment	Persuasion	Empowers followers	Empowerment
Commitment to the growth of people		Pioneering	Listening	Agapao love	Love
Building community		Integrity	Encouragement Teaching		

Source: Anderson J.A (2008).

According to Patterson (2003) servant leader leads and serve with the following attributes:

**Agapao Love:** Patterson model of servant leadership considered agapao love as the corner stone of this paradigm. According to Winston (2002) agapao means to love in a social sense and this love inspire a leader with a sense of altruism, which in turn consider the followers' needs, wants and desires in their first priority. Swindoll (1981) pointed out that the true love and servant hood go parallel; Ferch and Mitchell (2001) suggest love as a primary objective for leaders and Crom (1998) stated that servant leaders care their followers as their own children.

**Humility:** Servant leader do not think that he/she is better than others. Not being self-focused rather others-focused is true humility. It should not be misinterpreted that humility is to consider one's view as low rather to view oneself not better or worse than other do (Swindoll, 1981). Effective leaders show respect for employees and acknowledge their contribution to the team objectives which is considered as true humility (Crom, 1998). Servant leaders accept mystery and feel comfort with ambiguity which is again the evidence of humility (Distefano, 1995).

**Altruism:** Helping others selflessly, without any personal gain is called altruism (Kaplan, 2000). Eisenberg (1986) also defined altruism as "voluntary behavior that is intended to benefit another and is not motivated by the expectation of external reward". These authors and Johnson (2001) considered altruism as an ethical perspective. On the other hand Elster (1990) is of the view that it is not necessary that altruistic actions selfless, these can have self-interest as well. Few others have described altruistic behaviors in types; for example, Jencks (1990) is of the view that there are three types of altruism: emphatic, communicative and moralistic. Oliner (1996) said that altruistic actions run along a continuum from least to most self sacrificing behaviors, "conventional altruism" and "heroic altruism" are the two extreme of this continuum and in heroic altruism, actor is willing to sacrifice his/her life for other. Monroe (1994) defined altruism as "behavior intended to benefit another, even when doing so many risks or entail some sacrifice to the welfare of the actor". Self sacrifice is ultimate end of altruism.

**Vision:** According to Webster's dictionary vision is "the act or power of imagination; mode of seeing or concerning; or unusual discernment or foresight" (Merriam-Webster Online Dictionary, 2003). Blanchard (2000) defined vision "a picture of the future that that produces passions". Leadership is incomplete without vision. Charismatic/Transformational has the capability of developing and articulating a clear vision, which is the hallmark of their better performance (Hauser and House, 2000). Servant leaders build corporate vision from their own personal vision (Fairholm, 1997). Being proactive is one way of bringing vision into focus (Conger, 1992). Servant leaders dream for their future, they learn from their past experiences which may helpful in their present and future (Bennett, 2001). According to Greenleaf's model, servant leader must be conscious about his/her future and it is extremely important. Meaningful shared vision is mandatory for effective leadership in which actors are considered as the most important asset (Bannis, 2002). Vision is not a haphazard rather a calculated plan for future (Young, 2002). It is evident from the views of all the renowned researchers that servant leaders are visionary. They look ahead for searching opportunities for the welfare of their followers.

**Trust:** Trust is considered as an important characteristic of servant leader (Story, 2002). House and House defined trust as "confidence in or reliance on another team member in terms of their morality and competence". Trust involves an element of uncertainty (Gautschi, 2000), but still it is an essential element for true leadership. Organizational and interpersonal trust can be developed by the values of integrity and honesty of employees which enhances their credibility (Russell, 2001). Fairholm (1997) and Melrose (1998) also considered trust as central to leadership. True leaders are open minded and are willing to receive input from followers which

enhances their trustworthiness (Kouzes and Posner, 1997). Leaders, who are trustworthy, have loyal followers, which increase their credibility and pave way for their ultimate success.

**Service:** Responsibility towards others is called serving (Wis, 2002), and leaders accept the fact that servant leadership revolves around this act of serving others (Russell and Store, 2002). It is considered as the arch stone of the servant leadership model, and they exhibit it in their values, attitudes and behaviors (Lytle et al, 1998). Block (1993) gave a high value service by considering it everything and serving people are accountable for those being served.

**Empowerment:** Delegating authority to others is empowerment, servant leaders listen their followers views, respect them, persuade them for teamwork and love and egalitarianism are of utmost value for them (Russell and Stone, 2002). It is argued that a thorough understanding of an issue needs to empower people so that they may be able to reach to the minute details of the issue and to participate fully in decision making process (McGree-cooper and Trammell, 2002). Bass (1990) stated that sharing powers with followers in planning and decision making is called empowerment. Ciulla (1998) identified two distinct categories of empowerment: “Bogus empowerment” and “Empowerment”. In the first powers are shared with followers without changing the moral relationship between leaders and followers and later change the rights, responsibilities and duties of leaders as well as followers.

#### **Similarities between the two leadership styles**

Thorough analysis of literature on transformational and servant leadership revealed that both leadership styles portray relatively analogous picture. It is most probably, because of the people oriented motto of both leaders. Stone et al (2004) pointed out framework of these two leadership concepts incorporate the following common attributes.

**Influence:** Literature has a high consensus on the point that transformational and servant leadership both are highly influential. Charisma is the central attribute of transformational leadership (Bass, 1985; Graham, 1991) through which they influence their followers. Stone et al (2004) stated that “anecdotal evidence suggests that transformational leadership rely more on their charismatic attributes to influence followers, whereas servant leaders significantly influence followers through service itself”. Although their approach towards influencing followers is different but still, both leaders are highly influential for their followers.

**Vision:** Transformational and servant leaders are high visionary by nature. They have the ability to articulate their vision in a best possible way to their followers. Communication is necessary for articulating vision, which is the most important attribute of both leadership styles.

**Trust:** Mayer et al (1995) defined trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the truster, irrespective of the ability to monitor or control that other party”. Both leaders have a high confidence in their followers; hence a very harmonious relationship is developed between leader and followers. Such environment guarantees interpersonal trust which in turn enhances the overall organizational performance.

**Respect or Credibility:** Stone et al (2004) portrayed the picture of both leadership in a very good way. According to their view both type of leaders have common characteristics of respect and credibility. They are both competent enough and hence, their followers show a sense of high respect towards them. Their trustworthy, visionary and influential personalities enhance their credibility.

**Risk sharing or delegation:** Black and Mouton (1964) developed their well-known leadership Grid,

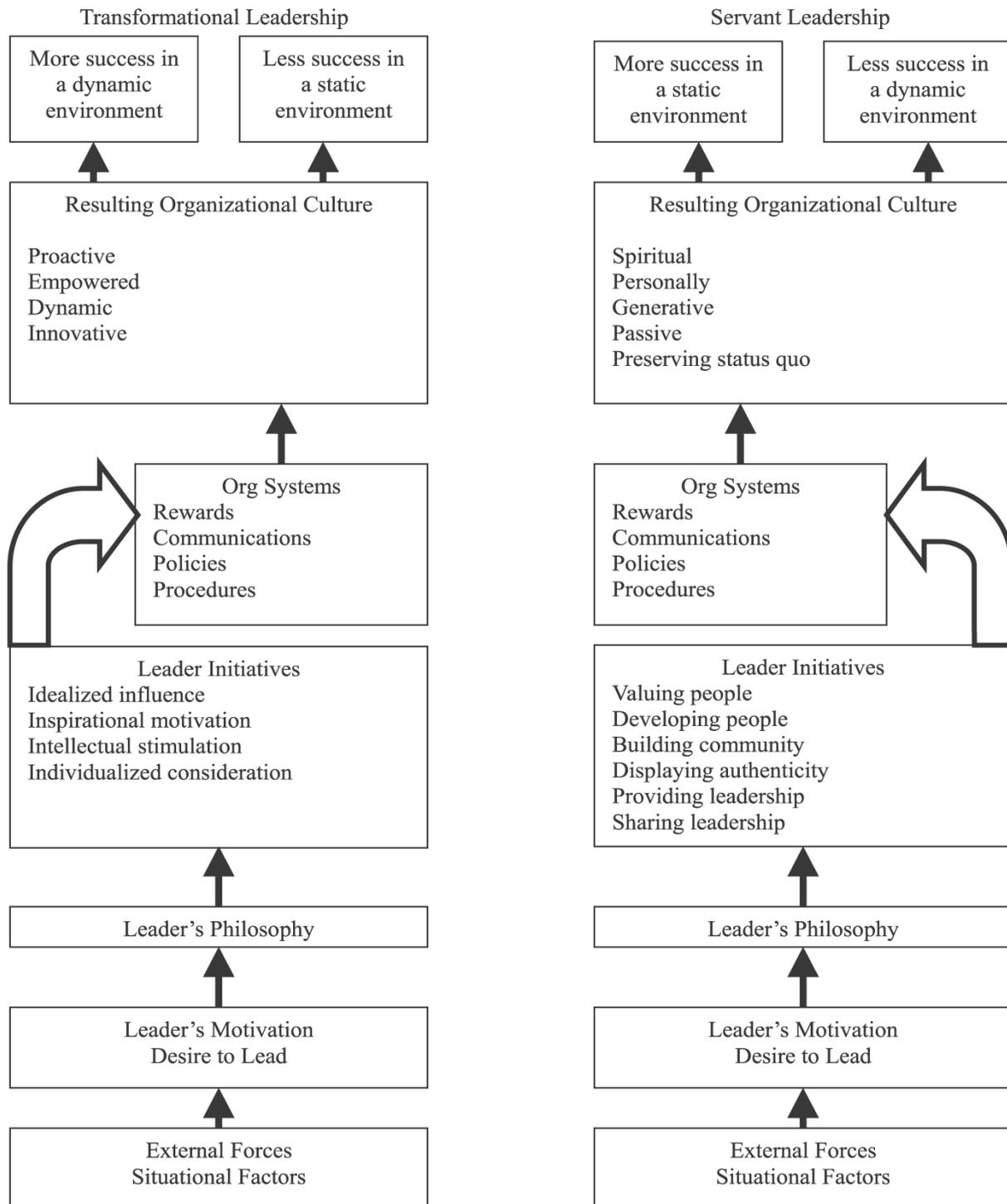
based on two contrasting dimensions: *concern for people and concern for production*. Both

dimensions are considered important in the contemporary leadership literature. A lot of leadership literature goes to transformational and servant leadership paradigm. Both frameworks pay a high concern for production and people. Unlike the autocratic leader, they both delegate authorities to their followers in order to minimize their risk. They incorporate the followers' views in future planning which may act as a motivating tactic for better performance.

**Integrity:** It is evident from the literature that transformational and servant leadership both has a high concern for production as well as for people. They are very sincere with their primary causes which are the accomplishment of organizational objectives for transformational leadership and well-being of followers for servant leadership respectively. Leadership literature have a high consensus upon the fact that both leadership paradigm are highly ethical and the element of self-interest is not present in both leadership; which enhances their credibility and in turn make better the overall organizational performance (Stone et al, 2004).

**Modeling:** Leading by acting is the whole philosophy of both transformational and servant leadership. Both the theories emphasize the importance of vision and articulating it in the best possible manner. Unlike the autocratic leaders they are not indifferent towards the strategic objectives. They are of the opinion that followers can best be motivated when leaders take keen interest in the practical implementation of strategic planning.

**Figure 1. Comparative Model of transformational and servant leadership:**



Source: Smith *et al.* (2004)

**Differences between transformational and servant leadership**

Transformational and servant leaderships are different on the following five important concepts (Parolini, 2008).

**Moral distinction:** Researchers like Burn (1978), Bass (1985), Graham (1991), Whetstone (2002), Whittington (2004) and Stephen et al (1995) explored moral distinction in both the leadership styles. Burn described Transformational leaders as “moral in that it raises the level of human conduct and ethical aspiration of both leader and led” (p, 20). In contrast to Burn views Bass (1985) declared that Transformational leader can be moral or immoral and included tyrannical leaders in the list of Transformational leaders. This remarkable statement induced rebuttal from other researchers. Their continuous support for organizational objectives is declared as the potential moral weakness of this leadership style. Stephen et al (1995) support the moral weakness of Transformational leaders in a manner that they may violate organizational ethical norms for the sake of overall organizational objectives. Leader consciousness and service orientation towards followers are the two important servant leadership traits which overcome ethical issues aroused in case of transformational leadership. Organizational objective is the primary motivator for transformational leaders which can be self-serving and egoistic, while serving behaviors of servant leaders are more altruistic in nature (Whittington, 2004). Bass and Steidlmeier (1999) admitted Bass earlier statement error and agreed upon the moral nature of transformational leader and defined it as “transformational leaders strive to align their own and others’ interest with the good of the group, organization and society”.

As oppose to the vague picture of transformational leaders’ moral conception (Greenleaf, 1977) clearly identified moral authority as a key factor to servant leadership. Covey describes four dimensions as important towards servant leaders’ moral conscience.

- ❖ Sacrificial service through submitting one’s ego to higher purposes;
- ❖ Conscience that inspires servant leaders to become part of a cause worthy of their commitment;
- ❖ Conscience that teaches servant leaders that the ends and means are inseparable; and
- ❖ Conscience that moves servant leaders from independence to interdependence through relationships.

Servant leader is moral on the basis of his/her sacrificial services and conscience which is best stated by Greenleaf (1977) in his classical statement “the servant leader is servant first. It begins with a natural feeling that one wants to serve, to serve first. Then conscious choice begins one to aspire to lead”.

**Focus distinction:** Literature has a consensus on the point that both leaders can be differentiated on the basis of aim and focus (Greenleaf, 1977; Stone et al, 2004; Bass, 2000 and Graham, 1991). Servant leader focuses on fulfilling the highest priority needs of followers (Greenleaf, 1977). On the other hand transformational leader aim, focus and allegiance are directed towards the organizational or group goals (Bass, 2000; Graham, 1991 and Stone et al, 2004). Graham (1991) proposed that “the primary allegiance of Transformational leaders is clearly to the organization (or to themselves) rather than to followers’ autonomy or to universal moral principles”. Bass (2000) supported the distinct aim of both leaders in his classical statement “servant leadership goes beyond transformational leadership in selecting the needs of others as its highest priority”, whereas transformational leaders “strive to align their own and others’ interests with the good of the group, organization or society”.

**Motive and mission distinction:** Motives and mission of both, transformational and servant leaders are different (Smith et al, 2004). The former create “empowered dynamic” culture which results in organizational growth and dignity, and the later create “spiritually generative” culture, primary focus of which is individual growth and dignity. Transformational leaders are highly environment sensitive, actively engaged in responding to changes in order to bring revolutionary changes (Smith et al, 2004). They added further that servant leaders motivating factors are

egalitarianism and individual growth which results into a culture which is passive towards external environment. So servant leaders focus on evolutionary changes. On the basis of these assumptions Humpherys (2005) stated that “servant leaders begin with a feeling of altruism and egalitarianism while transformational leaders are more motivated by organizational success, particularly within a tumultuous external milieu (p.1416).

**Development distinction:** Researchers like Greenleaf (1977), Bass and Steidlmeier (1999) and Bass (2000) worked on both type of leaders’ inclination towards leading or serving and what they want to: develop their followers into potential leaders or servants. Primary concern of servant leader is to develop their followers into autonomous moral servants. So they induce their followers to follow their own conscious rather than of leaders’ conscious. Servant leader always think for the benefit of society, so they focus on developing other servant leaders in the best interest of society (Greenleaf, 1977). On the other hand transformational leader transform their followers into leaders (Bass and Steidlmeier, 1999). They added further that transformational leaders develop their followers into leaders which are almost similar to them in all respects. Bass (1995) explained that “transformational leaders convert followers into disciples; they develop followers into leaders” (p.467). They identify themselves with the organization and transform their followers accordingly. So leaders, followers and organizational mission and objectives are highly interdependent (Bass, 2000).

**Influence distinction:** Stone et al (2004) stated that “anecdotal evidence suggests that transformational leaders rely more on their charismatic attributes to influence their followers, whereas servant leaders significantly influence followers through service itself”. Charisma is an important functional attribute of transformational leadership due to which they influence their followers (Graham, 1991). Servant leadership paradigm is based upon the golden moral principle that the authority which deserve loyalty is that which is granted by followers to their leaders in response of leaders’ servant hood (Greenleaf, 1977). So they influence their followers by service and stewardship rather than to direct them (Stone et al, 2004), and they declared it a unique method of motivation. In contrast transformational leaders rely on their charismatic and enthusiastic nature in order to influence and motivate their followers.

#### **Contextual factors and leadership theories**

Theories of Transformational and Servant Leadership are considered as the most popular in the recent years. Context plays a vital role in determining, which leadership style is appropriate for a specific culture (Smith et al, 2004). They further added that rapidly changing environments are more appropriate for Transformational Leadership to be effective, whereas Servant leadership can be effective in a less dynamic environment. Transformational leadership occurred, when leaders and followers engaged in such a way that their goals become complementary with that of the organizational goals (Bass, 1985). Bass (2000) and Shamir and Howell (1999) are of the view that many leadership theories are context free and literature have neglected the context in which leadership is embedded. On the other hand Gibbons (1992) and Osbon et al (2002) emphasized that specific environmental situations demands particular kind of leadership. Osbon et al (2004) suggested that leadership literature without considering contextual factors in not invalid but is incomplete. They sum it up with a declaration “Leadership and its effectiveness, in large part, is dependent upon the context”. Leadership and context have mutual dependence upon each other. Conger (1999) cited the seminal work of Robert and Bradley (1988); they examined a school superintendent labeled as charismatic leader by their followers, in another situation (as state commissioner of education) that attribution was not retained.

Transformational leaders lead to an “empowered dynamic culture” whereas, Servant leader

behaviors create “spiritual generative culture” (Smith et al, 2004). They further added that context determine the effectiveness of leadership style. Transformational leaders and servant leaders are different for their Agentic and Communal properties (Barbuto and Gifford, 2010). Communal qualities are concerned with the welfare of other people and are associated with servant leadership approach and the Agentic dimension of behavior is primarily assertive, goal directed and controlling tendency, it is associated with Transformational leadership approach (Andersen, 2008). On the basis of above discussed literature we have come up with the following propositions.

**P. 1. Servant leadership model is suitable for more stable external environments and support evolutionary development purposes.**

**P. 2. Transformational leadership model is suitable for dynamic external environment and support revolutionary development purposes.**

### **Conclusion**

Overview of literature on transformational and servant leadership revealed that these important leadership theories have few basic similarities. They both are highly influential, visionary, trustworthy, respectable, believe on delegation of responsibilities and empowerment of employees, serve as role models and are perfect models of integrity and honesty. On the basis of these commonalities we have come up with a view that transformational and servant leadership theories are complementary ideologies, both focuses on excellent form of leadership.

Apart from these commonalities there are few points of variation between the two leadership theories. The most important point which actually differentiate these two leadership theories is that, transformational leaders focus on organizational objectives whereas servant leaders are more concerned with the satisfaction of their followers’ highest priority needs. In addition to this basic differentiating point, they can be distinguished on the basis of moral, focus, motive and mission, development and influence distinctions. Transformational and servant leaders’ behaviors lead towards different organizational culture. It is likely that transformational leaders would be more effective in dynamic culture while servant leaders would be suitable for static environment.

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## The Integration of Fuzzy Multi Criteria Decision Making Methods for Product Ranking

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### Abstract

Decision Making (DM) always is one of the main purposes of Operation Research (OR). Related to the importance of quantitative and qualitative factor's we have to use method's that include them both, one of these techniques is Fuzzy logic. Many of commercial companies do not use scientific methods for ordering goods, and usually orders are made by personal opinion. Such decision making will increase organizational costs and reduce their profit.

In this Article we are going to review methods that can help commercial organization's to predict and order good's, that will reduce companies costs and increase their incomes. To reach this target we have to use qualitative and quantitative element's that effect companies profit beside each other. For including both factors we have to use Multiple Criteria Decision Making (MCDM) method's .With this technique we can reach to all planned target's by considering qualitative and quantitative elements. The second issue we have to consider is the growth of uncertainty, the method that can include uncertainty in decision making is fuzzy logic. We will combine MCDM with fuzzy sets to make profitable suggestions for commercial companies. To reach this target we have used a Commercial Company as a case of study and used this company manager's as consultants.

As a review in this thesis, first alternatives and qualitative criteria's will be identified by consultant's opinions, by the use of Delphi Technique. Then, decision making matrix will be completed and criteria's weight will be calculated by the average of consultant's opinion, with the use of Likert Questionnaire. Finally, three fuzzy methods, De-fuzzy-Fuzzy TOPSIS and FDM software will sort the alternatives.

**Key Words:** Multiple criteria decision making (MCDM), Alternative's Ranking, Delphi Method, Fuzzy sets.

## Introduction

The speedy and increasingly daily changes make our setting changeable. In these unstable circumstances Repeat programming or strategy-making confront life firms to dangerous. The essential of improvement on such settings is flexibility.

One of the successful criteria on the importing and exporting is influential investment on the goods purchase. The commercial firms must select those good purchase strategies that maximize their sales and profits and minimize their costs. The forecasting sales methods can be useful but their efficiencies are limited. Because the managers can not invest base on next sales and must look at other criteria. Besides some of required criteria for managers, are not quantifiable. These criteria are depended on the mental judgments. The Aristotle binary logic does not have post value and instead of it Fuzzy logic was substituted. Therefore is used Fuzzy logic for transformation judgmental language. Variety of the decision-making variables leads to there is not comprehensive source for variable specification. Therefore the most effective source is expert's views.

The aim of this research based on above matters is introduce a procedure for importer and exporter firms specify and evaluation of the influential factors on the purchase and good ranking based on customer utility. Based on the empirical founding about one commercial firm we ranked choices of action .On the first we gathered experts views

about selection choices, criteria determination and weight allocation to each choice. On the next sections we will explain details of founding and research methodology after literature review.

## Literature Review

In our research we used integration of the multi-variables decision- making, Delphi, Fuzzy logic and integration method for goal achieving. Fuzzy Set Theory (FST), as pioneered by Lotfizadeh, allows for vague boundaries and provides a mechanism to utilize fuzziness or imprecise information of preferences, constraints, and goals. [5] In decision making. Fuzzy logic enables the decision-maker to emulate the human reasoning process with vague or imprecise data. [3]

With considering TOPSIS method as the main tool in this research, and related to the final aim of our paper, many researchers have been working on combining multi criteria decision making methods for ranking, sorting and selecting suppliers, goods, manufacturers, retailers and est. In 2008 integrating TOPSIS with multi objective decision making was used for supplier selection.[13]. A complete model also was designed in the same year. [15] A year later fuzzy TOPSIS method was used during the information technology outsourcing selection. [4] Group MCDM was also used in 2005 for selection and sorting problems. [26]In addition and by increasing the role of supply chains in every economy and industry, a MCDM revised model was proposed. [27]

Combining two different kinds of MCDM methods is also used by many researchers. In 2009 a mixed fuzzy TOPSIS with Entropy was used for selection problems. [12] Previously in 2007 a fuzzy AHP and TOPSIS method was used for project selection. [16]

## Delphi method

The Delphi method is a structured communication technique, originally developed as a systematic, interactive forecasting method which relies on a panel of experts.[10] In the standard version, the experts answer questionnaires in two or more rounds. After each round, a facilitator provides an anonymous summary of the experts' forecasts from the previous round as well as the reasons they provided for their judgments. Thus, experts are encouraged to revise their earlier answers in light of the replies of other members of their panel. It is believed that during this process the range of the answers will decrease and the group will converge towards the "correct" answer. Finally, the process is stopped after a pre-defined stop criterion (e.g. number of rounds, achievement of consensus, and stability of results) and the mean or median scores of the final rounds determine the results.[24]

Other versions, such as the Policy Delphi, [21] have been designed for normative and explorative use, particularly in the area of social policy and public health.[18] In Europe, more recent web-based experiments have used the Delphi method as a communication technique for interactive decision-making and e-democracy.[17]

Delphi is based on the principle that forecasts (or decisions) from a structured group of individuals are more accurate than those from unstructured groups.[25] This has been indicated with the term "collective intelligence".[11]

The technique can also be adapted for use in face-to-face meetings, and is then called mini-Delphi or Estimate-Talk-Estimate (ETE). Delphi has been widely used for business forecasting and has certain advantages over another structured forecasting approach, prediction markets. [8]

Delphi method was introduced with Round Research Company in USA for 1959 year .The objective of this method is to participate many of people for decision making. Delphi method is the process of organizing writhed communication between problems solving big group. This group is arranged proportion with type problem, and objectives of problem solving. [28]

This method based on this principle that; the best problem-solving way for which do not have a subjective and precise answer is interviewing from experts. The purpose of Delphi method practices is reliable and innovative viewing for decision-making information production. [9] Muller at el. (1994) said that Delphi method stages include:

Problem definition, decision-maker selection based on required skills, questionnaire design sending, receiving and analyzing completed questionnaires, views integration, responses classification and repeating this process until

experts' agreements are performed.[19]

## Multi criteria Decision-making

Herbert Symons says that decision-making is basis for all managers' activities. Decision-making for each level of organizational level can be performed with several thinking methods. But this process often needs precise and step-wise method. Decision-making methods are divided to many categories. One of these categories divides techniques of decision-making to two class; one-criterion and multi criteria. In general every decision-making problem has one or several criteria such as; profit, cost, time, satisfaction, distance, utility...

If aim of decision is one of these criteria, it shall define one-criterion problem. But those problems that have more than one criterion are named multi-criteria problems.

On the recent decades multi-criteria models were used increasingly. There were used for problem-solving such as; organizational, general, governmental, military, and transportation... problems.

Based on the general definition, multi-criteria decision-making are problems such as; especial or preference problems, evaluation, multi choices selections.

There are several multi-criteria methods. These methods based on processing data procedure are divided to; compensations and un-compensations methods. Un-compensations methods are those procedures that transaction between criteria is not allowable. In these methods, each criterion is in-dependant and evaluation is performed for each criterion independently. The compensations methods are those procedures that transaction between their criteria is authorized. These methods are categorized to three groups as follows:

1. Point's methods; these methods estimate a utility function for each choice and the best choice is selected base on the maximum utilities.
2. Aggregation methods; that based on which the best choice is based on minimum gap between choice and ideal choice.
3. Homogenous methods; the results of these methods are set of ranks that prepares required comparison. [1]

## Fuzzy Methods

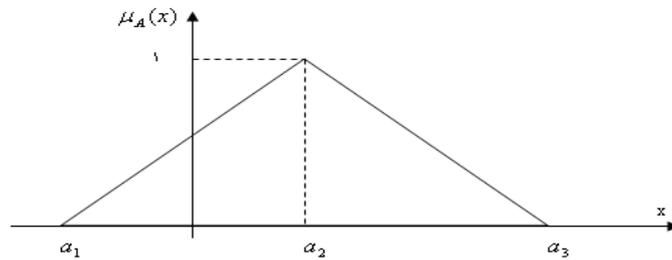
Fuzzy logic is a form of many-valued logic or probabilistic logic; it deals with reasoning that is approximate rather than fixed and exact. In contrast with traditional logic theory, where binary sets have two-valued logic: true or false, fuzzy logic variables may have a truth value that ranges in degree between 0 and 1. Fuzzy logic has been extended to handle the concept of partial truth, where the truth value may range between completely true and completely false.

[23] Furthermore, when linguistic variables are used, these degrees may be managed by specific functions.

Fuzzy logic began with the 1965 proposal of fuzzy set theory by Lotfizadeh.[7][30] Fuzzy logic has been applied to many fields, from control theory to artificial intelligence. The most of managerial decision –making procedures and techniques are deterministic. These methods have limited usage because the circumstances are not predictable yet.

Manblack and Asgarzadeh introduced Fuzzy method. On the deterministic sets each number or element is or is not belonged to a certain set. For example suppose  $X=\{1,2,3,4,5\}$  and  $A=\{2,3,4\}$  as a subset of  $X$ . Membership for 1 and 5 is zero and for 2, 3, 4 is one. But on the Fuzzy sets, membership is defined zero to one instead of zero or one.

Fuzzy number sets are used increasingly. We used triangular Fuzzy numbers based on the experts interviewing. A triangular Fuzzy number is defined as three elements such as  $A= \{a_1, a_2, a_3\}$  that is drawled as exhibit (1)



**Exhibit 1: Triangular Fuzzy Number**

Based on the exhibit (1) membership function is defined as follows:

$$\mu_A(x) = \begin{cases} 0 & x < a_1 \\ \frac{x - a_1}{a_2 - a_1} & a_1 \leq x \leq a_2 \\ \frac{a_2 - x}{a_2 - a_3} & a_2 \leq x \leq a_3 \\ 0 & x > a_3 \end{cases}$$

All of the mathematical calculations are allowed for Fuzzy numbers

### Integration Rank Methods

There are several models such as Total Weighted, TOPSIS, AHP... for criteria ranking. Sometimes decision-makers do not limit their ranking methods. They select several methods that they have difference results. Integration methods are used for integration of different methods results. These methods are includes winning and Copland. [20] We used three different methods for criteria ranking. Then the ranking results were integrated. Next the average of each goods-group ranks was determined as final group rank.

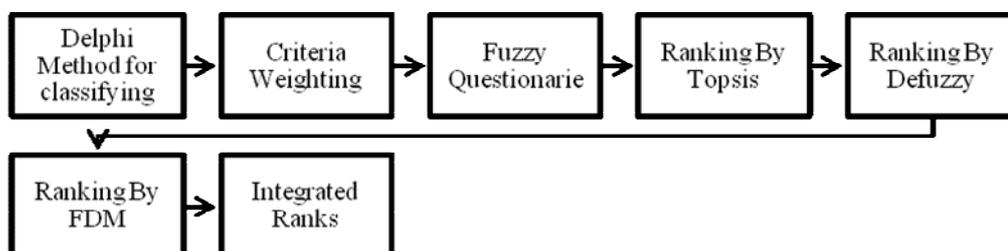
### Research Design

#### Sampling

Our statistical community was all of exports and specialists that had determinant view on one of the Iranian big commercial firm. We selected all of them without random sampling.

### Research Methodology

The main problems on our commercial firm were; 1) imports or exports goods grouping, 2) ranking in the first we specified firm experts. Then we used Delphi method for goods groping and ranking based on the firm experts views. Then we determined comparison criteria for goods ranking. These criteria to deterministic (quantify) and expert's views (objective) that attained with Delphi method. After determination goods and criteria, was made decision – making matrix. Then relatively situation of each choice based of each criterion was determined. The methodology used in this research is mentioned as diagram below:



The export views or judgmental variable were explained with Likert scale. Then judgmental or quality variables were converted to triangular fuzzy numbers based on fuzzy logic. Next by fuzzy numbers processing, we compared choices and determined rank and priority of choices.

We divided 390 items of goods on especial groups for choices definition. The goods firm can divide to goods groups.

This grouping simplified and averaged our decision – making problem and foliated suitable decision – making. Furthermore we executed Delphi method. The first we specified 6 persons of firms managers as export peoples. Then we asked experts that they group firm goods. We participated with experts for goods ranking, on the end we determined four groups of goods included; medical requirements, house requirements, chi ken requirements and luxury requirements.

After choices definition we specified choices comparison criteria. Then we divided these criteria on two groups (quantity, quality, objective or subjective). The quantity variables were included profit of each goods group (C1),

waste time for goods purchase (C2), were gathered from accounting and other documents. Quality data were gathered by Delphi method. For this purpose we repaid a questionnaire and distributed it between firm's experts.

After four it ration following criteria were specified:

**Table 1: Quality criteria for groups ranking**

Criteria	Type	Code
Customer satisfaction	Positive	D1
Goods Quality	Positive	D2
Reliability	Positive	D3
Simplify of transport	Positive	D4
Competition	Negative	D5
Next fortunate	Positive	D6

Then we prepared a questioner and distributed it between firm’s experts for determination weight of each criteria. The importance of each criteria was determined by expert’s views. Then was computed average of experts, views.

For this reason quality data were converted to triangular fuzzy data as we showed on table (2), [22]

**Table 2: fuzzy conversion**

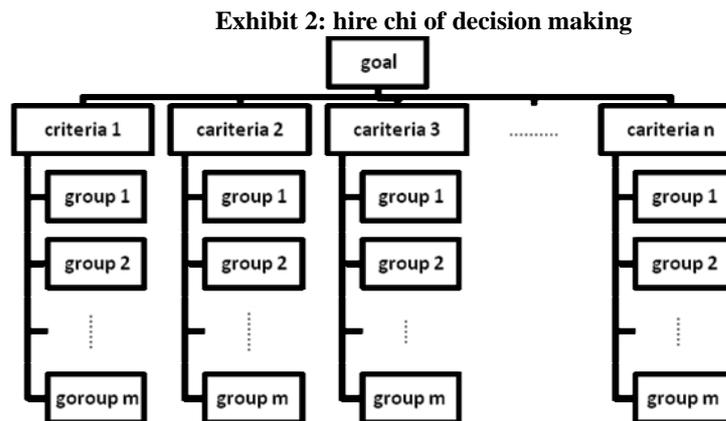
Quality criteria	Triangular fuzzy criteria
Very , very much	(9,9,10)
very much	(7,9,9)
Much	(3,5,7)
Little	(1,3,5)
Very little	(0,1,3)
Very, very, little	(0,1,1)

The average weighs of experts views was showed on table (3)

**Table 3: Experts views average**

Weight	Criterion
(6/3,7/6,9)	Customer satisfaction
(6, 7/6,8/8)	Goods Quality
(4/6,6/8,6/3)	Reliability
(2/5,4,1/3)	Simplify of transport
(2/1,3,6/5)	Competition
(4/3,4/6,8)	Next fortunate
(0/87,0/9,0/98)	Goods group profit
(0/6,2,3/3)	Wasted time

As we showed on exhibit 2 decision-making matrix has four choices and eight criteria. Our criteria include two quantity and six quality criteria as followed on exhibit (2).



Then we must define our decision-making matrix for choices ranking. The table 4 was showed this matrix. For this table was arranged a meeting of experts for three hours.

**Table 4: decision-making matrix**

Weights	Criteria	Medical	Furniture	Metal(steel)	Luxury
(6.3 ,7.6 ,9)	Customer satisfaction	(8,9,9.5)	(5.3,7.3,8.6)	(7,8.3,9.3)	(5,7,8.6)
(6.7 ,6 ,8.8)	Quality	(8.3,9,9.6)	(4.6,6.3,8.1)	(6,8,9)	(5,7,8)
(4.6 ,6.8 ,6.3)	Reliability	(8,9,9.5)	(3,5,7)	(4.3,6.3,7.6)	(4,6,7.6)
(2.4 ,1,5.3)	Transportation	(3.3,5.3,7.3)	(1.3,3.3,5.3)	(5.3,7.3,9)	(5.6,7.6,9.3)
(2.1 ,3 ,6.5)	Competition	(0.6,2.3,3.6)	(6.3,8,8.8)	(1.5,3.3,6.3)	(1,2.6,4.3)
(4.3,4,6,8)	Improvement	(1.5,3.3,5.3)	(4.6,6.8,6.3)	(4.3,6.3,8)	(3.6,5.6,7.6)
(0.87,0.9,0.98)	Profit	226038500	81310570	38396610	84579450
(0.6,2,3.3)	Wait time	31.2	6.8	1.3	2.8

We used 2 equations for elimination the scale of decision-making matrix, these equations are as following: [14]

1. Profit = maximization criteria  $R_{ij} / \text{Max}R_{ij}$
2. Cost = minimization criteria  $\text{Min}R_{ij} / R_{ij}$

On the other words for profit criteria we divided by each element to maximum of their criteria elements to each related element for this reasons was used maximum or minimum three angular fuzzy numbers. On the second stage we made weighted matrix. For this matrix we multiplied weight or importance of each criterion by weights or importance's coefficients of each choice. If  $N_{ij}$  is without scale decision-making matrix and  $W_{ij}$  is weighted matrix of criteria,  $V_{ij}$  or find weighted matrix will be computed from multiple of  $N_{ij}$ . [29]

$$V_{ij} = W_{ij} \otimes N_{ij}$$

The find weighted matrix was shown on table 5.

**Table 5: Find weighted matrix**

Code	D1	D2	D3	D4
A1	(0.52,0.71,0.9)	(0.5,0.69,0.85)	(0.38,0.61,0.81)	(0.07,0.22,0.4)
A2	(0.34,0.57,0.81)	(0.27,0.5,0.73)	(0.14,0.34,0.59)	(0.02,0.13,0.29)
A3	(0.45,0.66,0.87)	(0.36,0.61,0.82)	(0.2,0.42,0.65)	(0.11,0.03,0.49)
A4	(0.32,0.55,0.81)	(0.3,0.55,0.71)	(0.18,0.4,0.65)	(0.12,0.32,0.51)
Code	D5	D6	C1	C2
A1	(0.02,0.07,0.4)	(0.07,0.13,0.5)	(0.87,0.9,0.98)	(0.001,0.006,0.01)
A2	(0.011,0.021,0.03)	(0.23,0.36,0.8)	(0.31,0.32,0.35)	(0.008,0.03,0.05)
A3	(0.014,0.06,0.16)	(0.21,0.34,0.76)	(0.14,0.15,0.16)	(0.06,0.02,0.33)
A4	(0.02,0.06,0.25)	(0.18,0.31,0.72)	(0.32,0.33,0.36)	(0.02,0.07,0.1)

## Founding's:

At present we can compute ranking of choices. Base on previous concepts we ranked goods groups which; fuzzy TOPSIS, de – fuzzy and fuzzy package. We used integrated all results of three methods.

## De-fuzzy ranking

Base on this method we computed total point of each choice as a triangular fuzzy number and then converted it to deterministic number for choices, ranking. Therefore on the first we computed total point of each choice by adding all of row elements normal weighted points. Then we used following equation for conversion fuzzy points to determine stick points:

$$G_M = \frac{a + 4b + c}{6}$$

This equation was used for all of choices and computed rank of each choice as table 6.

**Table 6: Goods ranking with De-fuzzy method**

Row	Group	Code	Total of fuzzy point	Total of determines tic points	Rank
1	Medical	A1	(2.43,3.33,4.85)	3.433	1
2	Furniture	A2	(1.32,2.27,3.65)	2.3416	4
3	Metal(steel)	A3	(1.54,2.74,4.24)	2.79	2
4	Luxury	A4	(1.46,2.59,4.11)	2.655	3

## TOPSIS ranking

Based on fuzzy TOPSIS are determined ideal fuzzy negative or positive choices. The ideal fuzzy positive choice is noted by A~j. There are three methods for these vectors computation:

1. Chen & lean method (2005): base on this method, maximum of three – angular fuzzy number is selected for A~j+. Computation. Then minimum of three – angular fuzzy number is selected for A~j. computation .[6]

$$FPIS = A^+ = (V_1^+, V_2^+, \dots, \tilde{V}_n^+) \xrightarrow{\text{Where}} \tilde{V}_j^+ = \text{Max}\{V_{ij3}\}$$

$$FNIS = A^- = (V_1^-, V_2^-, \dots, \tilde{V}_n^-) \xrightarrow{\text{Where}} \tilde{V}_j^- = \text{Min}\{V_{ij1}\}$$

2. Wang method (2007) : based this method ideal positive choice equals (1,1,1) and ideal negative choice equals (0,0,0) .[29]
3. Jahanshaloo & Izadkhah method (2006): Based on this method ideal positive choice equals maximum of three – angular fuzzy numbers. In this method ideal negative choice equals minimum of three – angular fuzzy numbers .[14]

$$FPIS = A^+ = (Max\{V_{ij1}\}, Max\{V_{ij2}\}, Max\{V_{ij3}\})$$

$$FNIS = A^- = (Min\{V_{ij1}\}, Min\{V_{ij2}\}, Min\{V_{ij3}\})$$

In this article we used Chen – lean method. Negative and positive ideal vectors were showed on table 7.

**Table 7: fuzzy Ideal**

Criteria	D1	D2	D3	D4	D5	D6	C1	C2
Positive ideal	0.9	0.88	0.83	0.53	0.5	0.8	0.98	0.33
Negative ideal	0.32	0.21	0.09	0.002	0.011	0.07	0.008	0.001

On the next step difference between positive and negative ideals way computed. The different between each choice from positive ideal choice was defined with di+ .and the difference between each di- . For this reason 2 equations used as fallows [6]:

$$d_i^+ = \sum_{j=1}^n d_v(V_{ij}, V_j^+), d_i^- = \sum_{j=1}^n d_v(V_{ij}, V_j^-) \quad i = 1, 2, \dots, m$$

The dv (vij, v~j-) on above equations is explained difference between choice s situation from fuzzy ideal choice. It is computed as follows:

$$d_v(\tilde{m}, \tilde{n}) = \sqrt{\frac{(m_1 - n_1)^2 + (m_2 - n_2)^2 + (m_3 - n_3)^2}{3}}$$

$$\tilde{m} = (m_1, m_2, m_3), \tilde{n} = (n_1, n_2, n_3)$$

The of each choice s differences from positive and negative ideal was defined as di- , di+. After these computations, closeness coefficient or CCI index is calculated for each choice. For this reason following equation is used. [29]

$$CC = \frac{d_i^-}{d_i^- + d_i^+} \quad \text{Where } i = 1, 2, \dots, m$$

On the next step, all choices are descending arranged (from maximum to minimum). We showed differences of each ideal vector and theirs closeness coefficients on table 8.

**Table 8: fuzzy – top sis group ranking**

Group	d <sub>i+</sub>	d <sub>i-</sub>	cc <sub>i</sub>	Rank
A1	2.5	3.11	0.55	1
A2	3.51	2.1	0.37	4
A3	3.22	2.42	0.42	2
A4	3.247	2.33	0.41	3

Group Ranking with FDM fuzzy package there are several Fuzzy packages such as ; fuzzy decision making (FDM), fuzzy gen(FG) , fuzzy tech(FT), ... . We used FDM package in this article. In this package with definition of choices, criteria, criteria type (objective or subjective, fuzzy or deterministic) and importance degree of each criteria, we make decision – making matrix. Then with completion each cell of matrix and run exciting calculated ranks of choices. There is showed package ranking result on exhibit (3).

**Exhibit 3: package ranking choices**

Group	Code	Points	Rank
Medical	A1	94.96	1
Furniture	A2	78.54	2
Metal(steel)	A3	70.53	3
Luxury	A4	47.73	4

## Result Integration

After goods ranking with each fuzzy method we can integrate results of three methods , we calculation . Integration results are showed on table (9):

**Table 9: Integration ranking results**

Grope	Code	Top sis ranking	De-fuzzy ranking	Package ranking	Average
Medical	A1	1	1	1	1
Furniture	A2	4	4	4	4
Metal(steel)	A3	2	2	2	2
Luxury	A4	3	3	3	3

As showed on table 9 ranking results of three fuzzy methods are seemly. For this reason if we used cap land or winning methods for integration, result will be not changed.

## Conclusion

This article is based on empirical research related with a active Iranian commercial firm. This firm purchases (imports) and sells (exports) 390 goods types. The decision making process in this firm do not follow from any especial principal and increase firms costs. Un-sailed and loosed sales are affected cists increasing. All of firms goods purchase based on firm boss and sales manager views. They do not use any subjective of objective criteria.

This research was performed based on objective and subjective criteria. In the first step we specified all of quantities and views. On the second step we converted qualities (objective) experts views to quantities (subjective) numbers based on fuzzy logic and triangular fuzzy numbers. On the second step were ranked firms goods groups with each fuzzy method. We divided all of firm s goods to four group based on Delphi and step – wise expert view surveying.

On the find step were integrated results of fuzzy multi – methods. For this purpose, we calculated average of three methods results. As an interesting point we observed that results of three fuzzy methods were same, therefore average of ranks was same as results of each method. We proposed for next researches that combine linear or goal programming whit fuzzy methods. Or they can rank integration of Delphi and fuzzy methods. We used three – angular fuzzy number and they can utilize other fuzzy numbers.

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# **EFFECTS OF STOCK SPLIT ON STOCK LIQUIDITY AND STOCK PRICE OPTIMALITY OF COMPANIES QUOTED AT NAIROBI STOCK EXCHANGE.**

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## ***Abstract***

A number of researchers have found a stock split is normally followed by either positive abnormal returns or increased stock liquidity or both. However other researchers such as Murray (1985) and Bley (2002) found results that are contrary to this. The objective of this paper was to assess the consequence of stock splits on stock liquidity of Kenyan firms quoted at the NSE.

The research was a causal study with a trend analytical design aimed at determining the relationship between the stock liquidity positions as a result of the stock split event. The population consisted of all companies quoted in the NSE that had undertaken a stock split between the years of 2005 and 2011. The data used was secondary data on daily volumes of stock traded and daily closing stock prices that was retrieved from the NSE website. The model used for data analysis was the Amivest liquidity ratio which was developed by cooper Groth and Avera (1985). This model measured the shillings volume traded for each 1% change in stock price. The data analysis package used was Excel spread sheet.

The results from the study found out that generally the liquidity of stock, as measured by the Amivest liquidity ratio, is relatively higher in the days before the stock split than in the days after the stock split. It was also observed that liquidity tends to be lowest in the days around the stock split. Generally the aggregate liquidity position in the month before the stock split was found to be higher than in the month after the stock split.

It was also observed that after the stock split, stock price showed optimality by trading at a relatively constant stock price in almost all the companies.

**KEY WORDS** : Stock split, Price optimality, Stock liquidity, Nairobi stock exchange

## 1.0 INTRODUCTION

There are various theories that have been propagated by various scholars on the motivators for stock split. A stock split increases the number of shares of a company while decreasing the price per share in equal proportion of share split ratio. As much as the stock split has been viewed as a cosmetic change companies continue to conduct the exercise. Therefore, it means that there must be some benefit, either real or perceived that results from a firm splitting of stock.

A stock split leaves investors no better or worse off than they were before the split since it is regarded as merely an accounting change. A stock split is a process used to increase the number of shares in order to issue more shares to current shareholders. In simple terms, when a company likes to increase the number of shares in the market, a stock split is used. For example, if an investor holds 100 shares of ABC at Ksh.100 per share, then it uses 2-1 stock split will result in owning 200 shares worth Ksh.50 per share. The outcomes of stock split process result in company's increase of number of shares and reduction in prices but market capitalization remain the same. Although the number of shares outstanding multiplies by a specific multiple, the total value of the shares remains unchanged compared to the pre-split amounts Savitri and Martani (2008). A company engages in a stock split in order to reduce its share price by increasing the number of shares available. Current owners of the stock are given more shares so that they maintain the same percentage of ownership in the company.

When a company decides to splits if shares they can split then at any ratio Dhar and Chhaochharia (2008). Stock split is usually done by companies that have seen their share price increase to levels that are either too high or are beyond the price levels of similar companies in their sector. According to Wooldridge and Chamber (1983) when a stock split occurs, the balance sheet items remain the same; except that the total number of outstanding shares of the company increases proportionately to the ratio of split. The primary motive is to make shares seem more affordable to small investors even though the underlying value of the company has not changed.

By lowering the price of stock, companies try to make their stock more money friendly to investors. As a stock price increases, some investors will be psychologically unwilling to pay that high price. So a stock split brings the shares down to a more "attractive" level though the intrinsic value has not changed.

Musau (2007) noted that there was a Bull Run that kicked off in the Nairobi Stock Exchange in the year 2006, which made the market gain more than 50%. As earnings of companies increased, so did the demand for shares by the public. The price appreciation forced many companies to split shares owing to the nature of majority of the Kenyan. In another study by Aduda and Chemarum (2010) sought to find out the market reaction to stock split in the Kenyan market found out that market reacts positively to stock splits, by showing a general increase in volumes of shares traded around the stock split. There is also an increase in trading activity after the stock split as compared to that before the stock split

Musau (2007) also noted that before the companies split their stock, two typical market conditions were witnessed. First, there was a high demand for companies' shares which propelled the prices upwards. Secondly, more retail investors took up positions so as to qualify from the split multiples.

According to Anshuman and Kalay (2002), firms split their stocks to create liquidity. They argue that because of price discreteness related commissions, liquidity traders will time their trades based on stock price levels. Specifically, liquidity traders may defer their trades until stock prices drop to lower base levels to save transaction costs. Under this framework, a firm can enhance its stock's trading liquidity by resetting the stock price to an optimal level with a stock split.

Stock splits are also linked with positive abnormal returns either in the short run or in the long term. For instance, Maloney and Mulherin (1992) present fact of a wealth increase effect around the announcement and execution dates, for their sample of National Association of Security Dealers Automated Quotation stock splits that occurred between the beginning of 1985 and the end of 1989.

The Nairobi Securities Exchange (*NSE*) is the principal securities exchange of Kenya. Besides

equity securities, the NSE offers a platform for the issuance and trading of debt securities. The NSE is a member of the African Securities Exchanges Association (ASEA) and the East African Securities Exchanges Association (EASEA). It is an affiliate member of the World Federation of Exchanges (WFE)

In Kenya a growing number of companies have split their stock in the NSE including. The table below shows companies that have split stock from the year 2006 to 2011.

**Table 1 Companies that have split the stock at Nairobi Stock Exchange**

Company	Split	Split date
East African Cables	10:1	4/09/2006
Sasini	5:1	14/02/2007
CMC	10:1	26/02/2007
Kenya Commercial Bank	10:1	2/04/2007
Nation Media Group	2:1	25/07/2008
Equity Bank	10:1	25/03/2009
Kenol Kobil	10:1	1/06/2010
Kenya Power & Lighting Company	8:1	19/11/2010
Barclays	4:1	30/05/2011

The researchers therefore were guided by the following objectives in conducting the research

1. To explore whether stock split help to increase stock liquidity in a company quoted at the Nairobi stock exchange.
2. To determine whether splitting of shares helps to keep stock prices at the optimal level.

## **2.0 LITERATURE REVIEW.**

Fama et.al (1969) has been the pioneering study to examine the share price performance of splitting firms. Although the economic literature has not yet found a definitive explanation for either the abnormal returns observed around the announcement and execution dates, or the reasons why managers decide to split, different explanations, not necessarily mutually exclusive have been proposed. The more prominent hypotheses are the trading range hypothesis, the signaling hypothesis, the liquidity hypothesis and the neglected firm hypothesis.

### **2.1 Stock Splits and Firms Liquidity**

Since liquidity can be generally described as “the ability to trade large quantities quickly at low cost with less price impact,” Liu (2006, p. 631) points out that “this description highlights four dimensions to liquidity, namely trading quantity, trading speed, trading cost, and price impact.” Each conventional measure, such as turnover and bid-ask spread that has been used in the literature to examine the liquidity effect of stock splits, focuses on a separate and distinct dimension of liquidity; and, as Liu (2006) argues, they may not be accurate even in the single dimension they aim to capture.

Empirical studies used different proxies to explain the liquidity of stock after split. Copeland (1979) found that turnover decreased in the year after a split. In a related study done in German stock exchange from 1994 to 1996, Bley ,(2002) examined 40 stock splits. To avoid any size effects, were sample companies divided into two groups according to their market capitalization. After stock splits, daily trading volume decreased significantly for the class of high market capitalization stocks. In the Canadian market, Elfakhani and Lung, (2003) noted that both the number of transactions and the trading volume increased, whereas bid-ask spreads decreased following stock split announcements.

A reseach done by Goyonke et al. (2006) sought to find out the effect of stock split and liquidity over an after-event window which extended to six years. The findings were contrary to the general notion that splitting stock improved liquidity. The researcher found that split firms initially experienced worse liquidity within the first to twelve months which was temporary but

later the split experienced gains in the long run. Similarly, Holden, and Ukhov (2006) found that the worsened liquidity experienced by splitting firms is a short-term phenomenon. Liquidity improved after the split in the long run (2 years).

Gupta and Kumar (2007) in their study that was conducted in India concluded that there was no announcement effect associated with stock split.

liquidity and trading range hypothesis comes from management claims that the motivation for split activities is to bring stock prices down to a preferred trading range and improve liquidity.<sup>1</sup> Yet existing empirical research, finds that the impact of split on liquidity is mixed. Copeland (1979), Conroy, Harris, and Benet (1990), and Desai et al (1998), find that bid-ask spreads, increase, indicating worsened liquidity. Other authors, such as, Lamoureux and Poon (1987), Muscarella and Vetsuypens (1996) show that the number of trades per day, increase subsequent to splits. Lakonishok and Lev (1998) finds splits have no impact on split-adjusted trading volume. The inconclusive evidence reflects the challenge in the selection and in the interpretation of the liquidity proxy. Baker and Powell (1993) found that managers view liquidity improvements second only in importance to the trading range hypothesis. One interpretation of this reference to liquidity is that the number and diversity of shareholders increases following a stock split. The trading range and liquidity hypotheses are not necessarily mutually exclusive explanations. However, Easley, O'Hara and Saar (2001) suggest that individuals may have a preference for a specific trading range because liquidity is higher in that price range. The tax-timing hypothesis offered by Lamoureux and Poon (1987) suggests that the trading volume will increase and the tax-option value of the stock will increase following a stock split.

One general definition of common stock liquidity is the "accommodation of trading with the least effect on price, O'Hara (1997). Using proxies for liquidity, empirical evidence on the impact of stock splits on liquidity is mixed. Proportional bid-ask spreads have been found to either increase, Copeland (1979), or stay the same, Murray (1985).

## 2.2 Stock splits and optimal stock earnings

Fama, Fisher, Jensen and Roll (1969) argue that a large price increase at the time of a stock split

is due to altered anticipations concerning future dividends rather than due to any intrinsic effects of the splits themselves. This 'dividend hypothesis' however, does not appear to fully explain the observed market reaction to stock split announcements. For example, Grinblatt, Masulis and Titman (1984), report a significant stock price reaction to the announcement of stock splits by firms that do not pay cash dividends in the three years prior to the split. They argue that the valuation changes associated with stock split announcements cannot be attributed totally to revised expectations about near-term dividend increases. Fama (1976) suggests that it is likely that the information revealed by stock splits concerns earnings rather than dividends. He argues that it is possible that dividends are a passive variable in the whole process. That is to say companies tend to increase dividends when earnings increase and to decrease dividends when earnings decrease. In this view, the Fama, Fisher, Jensen and Roll data suggest that splits tend to occur when firms have experienced unusual increases in earnings, which accounts for the positive average residuals of splitting shares in the months preceding the split.

Lakonishok and Lev (1987), examine both dividends and earnings growth surrounding stock split announcements and conclude that the evidence is consistent with "either stabilization of earnings growth subsequent to the abnormal presplit growth, improved cash dividends prospects, or both.

Stock splits are a big event for both managers and traders. Managers may split their firms stock to achieve various objectives. Researchers have also built up a number of theories relating to both the pros and cons of a firm engaging in stock splits. As a result stock split announcements have become common phenomena among firms. However stock splits still continues to be one of the least understood topics in finance. The above literature review examines the various literature by published authors - such as Fama, Fisher, Jensen and Roll (1969); Lakonishok and Lev (1987); Grinblatt, Masulis and Titman (1984); Copeland (1979) just but to mention a few - in an attempt to better understand the impact of stock splits on stock liquidity of a firm

### 3.0 RESEARCH METHODOLOGY

The nature of the study was a causal study meant to assess the consequence of stock splits on the firm's stocks optimal price and liquidity. The study will have a trend analytical design in an attempt to determine the relationship between the stock split event and any changes in the stock prices and liquidity position as given by the liquidity proxy used. This method is appropriate since the study will attempt to achieve insights into the reaction of both stock optimal prices and liquidity before and after the stock split exercise.

The population was all the companies quoted on the Nairobi stock exchange that have split their shares between the years 2005 to 2011, will be drawn. The list of the companies to be studied is KenolKobil, East African Cables, Sasini Ltd, Barclays Bank, CMC Holdings, Kenya Commercial Bank, Nation Media Group, Equity Bank.

The researchers used secondary data will be used in this study whereby daily volume of stock traded and their respective daily closing stock prices will be considered. The data was obtained from the Nairobi stock exchange website.

The research covered a period of 30 days before the stock split and 30 days after the stock split so as to examine the changes in liquidity over this period. Hence time (t) will be given as:

$$t = -30 \text{ to } +30.$$

To measure the impact of stock splits on liquidity, the Amivest liquidity ratio will be used. The Amivest daily liquidity ratio was calculated as below;

- Calculate the volume of shares traded on each day (over the period of 30days before and 30 days after the split). Call it **Vol<sub>(d)</sub>** ... for day (d)
- Pick some representative price for each day. Call it **P<sub>(d)</sub>** which will be the closing price for day (d).
- Calculate the **Shilling Volume** for each day. That's **VOLS<sub>(d)</sub> = Vol<sub>(d)</sub>P<sub>(d)</sub>** for day d.

- Next, calculate the percentage changes in daily stock prices  $R_{(d)}$ , whether it's up or down. this will be given by:

$$R_{(d)} = \frac{P_2 - P_1}{P_1}$$

Where: P1 is the Closing price for previous day (d-1)

P2 is the closing price for day (d)

- Finally calculate the Amivest daily liquidity ratio as given by the formulae:

$$\frac{VOLS(d)}{R(d)}$$

The Amivest monthly liquidity ratio for the two months in consideration will be calculated as below;

- Calculate the **Total Shilling Volume for the month (VOLS<sub>(M)</sub>)** . That's :

$$VOLS_{(M)} = Vol_{(d1)}P_{(d1)} + Vol_{(d2)}P_{(d2)} + \dots + Vol_{(dn)}P_{(dn)}$$

Next, calculate the percentage changes in daily stock prices (whether it's up or down) for the market days of month:

$$R_{(m)} = R_{(1)} + R_{(2)} + \dots + R_{(n)}$$

Note that the total of the magnitudes of the daily changes with  $r = 1.23$  for a 1.23% change

Since the Amivest liquidity ratio represents the monthly shilling volume for each 1% change in stock price, then the monthly liquidity ratio will be calculated as;

$$\frac{1}{N} \sum \frac{VOLS(M)}{R(m)}$$

Where N represents the number of days for which data is available.

Microsoft excel spread sheet will be used to analyze the data. It will be used to prepare graphs presentations as well as summarizing the findings of the research of each company.

## The Daily stock prices and Liquidity Ratio against Days around Stock Split

In order to carry out this analysis, tables and graphs were generated for each of the companies. The findings of this study have been tabulated on the graphs below.

### 4.0 DATA ANALYSIS AND FINDINGS

**Figure 1 (a): Graph of Liquidity Ratio against Days around Stock Split for Sasini**

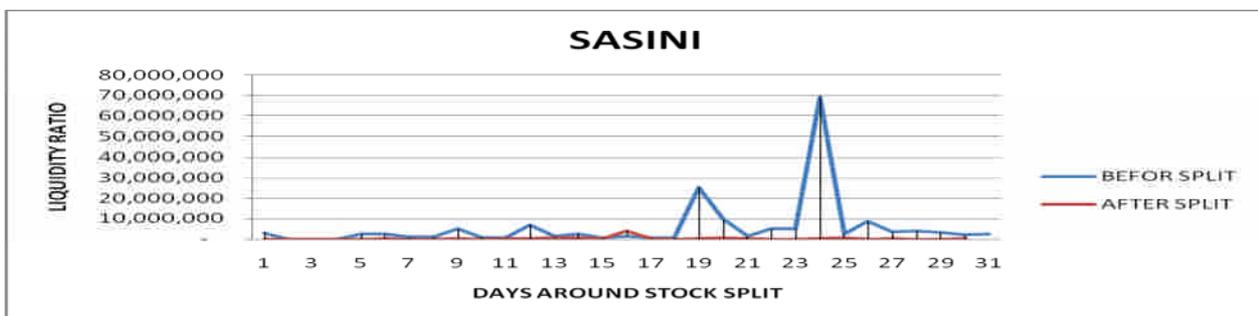


Figure 1.a. represents a plotted graph of liquidity ratio against days around stock split for Sasini. It reveals how liquidity changed on days before and after the stock split. The above graph depicts that the liquidity ratio of stocks of Sasini was relatively higher in days before the stock split as compared to the days after the split. It can be observed that the liquidity ratio was lowest just before and after the split date.

**Figure 1 (b): Graph of optimum price against Days around Stock Split for Sasini**

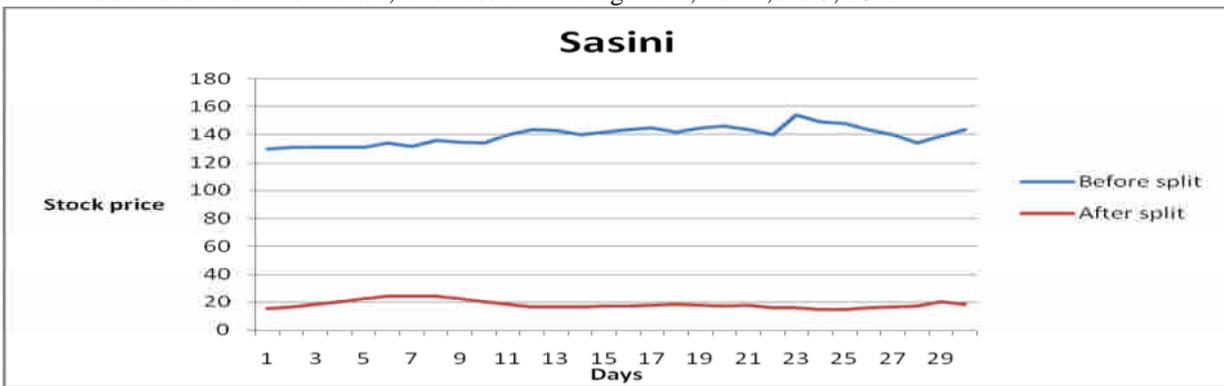
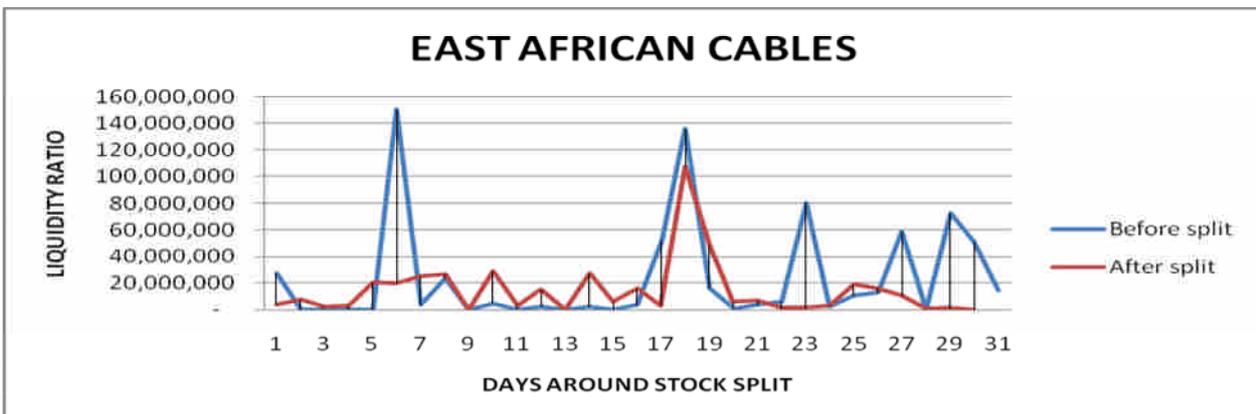


Figure 1.a. shows a plotted graph of stock price against days around stock split for Sasini. It illustrates that there existed some volatility on share price before the share split. It also shows that after the share split stock price showed optimality by trading at a relatively constant stock price

**Figure 2 a. Graph of Liquidity Ratio against Days around Stock Split for East African Cables**



The graph show how liquidity changed on days before and after the stock split. It is evident from the graph that the liquidity ratio of stocks of East African Cables was relatively higher in days before the stock split as compared to the days after the split

**Figure 2 (b): Graph of optimum price against Days around Stock Split for East African cables**

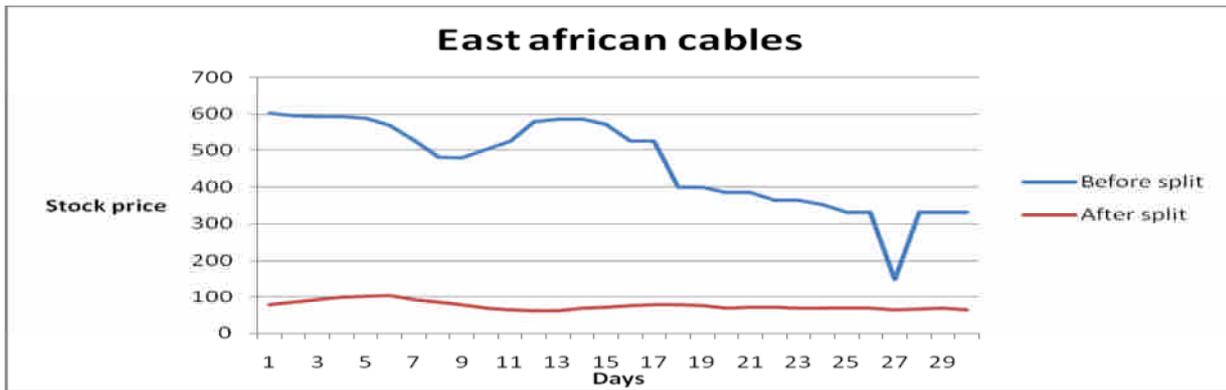
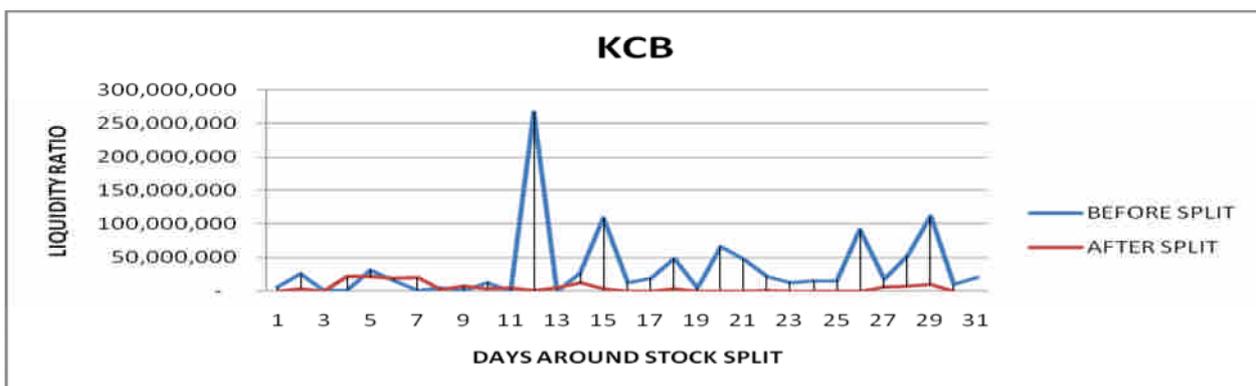


Figure 2.b. shows that high volatility existed on share price before the share split. It also shows that after the share split stock price showed optimality by trading at a relatively constant stock price.

**Figure 3(a): Graph of Liquidity Ratio against Days around Stock Split for KCB**



The graph illustrates how liquidity changed on days before and after the stock split. The above graph shows that the liquidity ratio of stocks of KCB was relatively higher in days before the stock split as compared to the days after the split. It can be noted that the liquidity ratio was relatively lower just before split date and relatively higher after the split date.

**Figure 3 (b): Graph of optimum price against Days around Stock Split for KCB.**

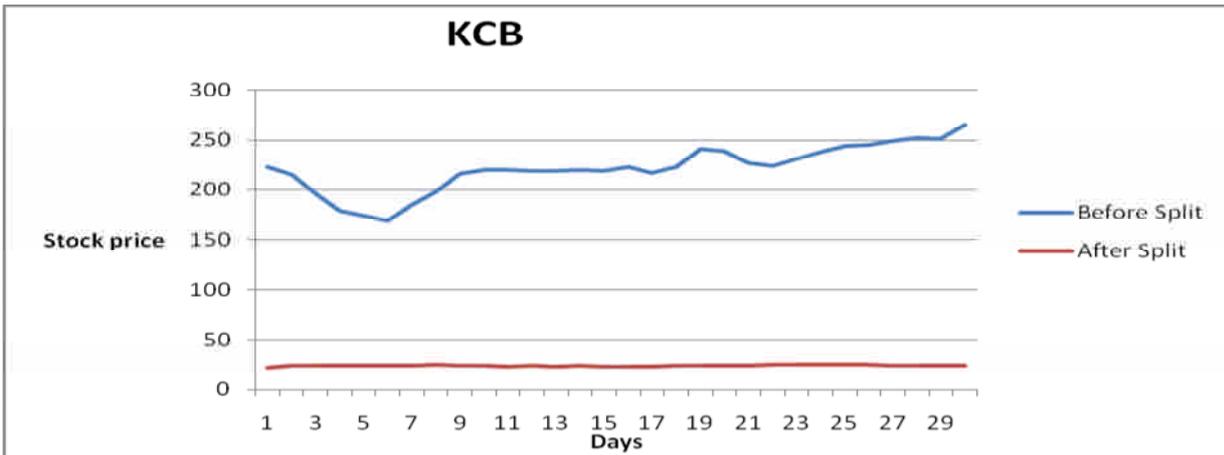


Figure 3.b. shows a plotted graph of stock price against days around stock split for KCB. It illustrates that high volatility on share price existed before the share split. It also shows that after the share split stock price showed optimality by trading at a relatively constant stock price.

**Figure 4(a): Graph of Liquidity Ratio against Days around Stock Split for CMC Motors**

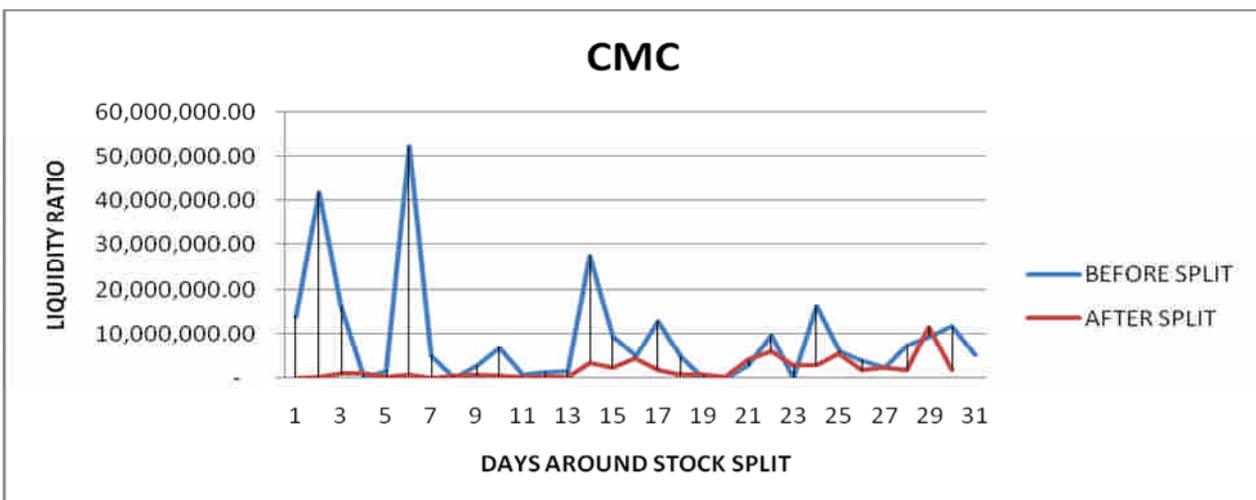


Figure 4.a. represents a plotted graph of liquidity ratio against days around stock split CMC Motors. It illustrates how liquidity changed on days before and after the stock split. The above graph shows that the liquidity ratio of stocks of CMC Motors was relatively higher in days before the stock split as compared to the days after the split. It can be noted that the liquidity ratio was highest just before the split date and lowest after the split date.

**Figure 4 (b): Graph of optimum price against Days around Stock Split for CMC Motors**

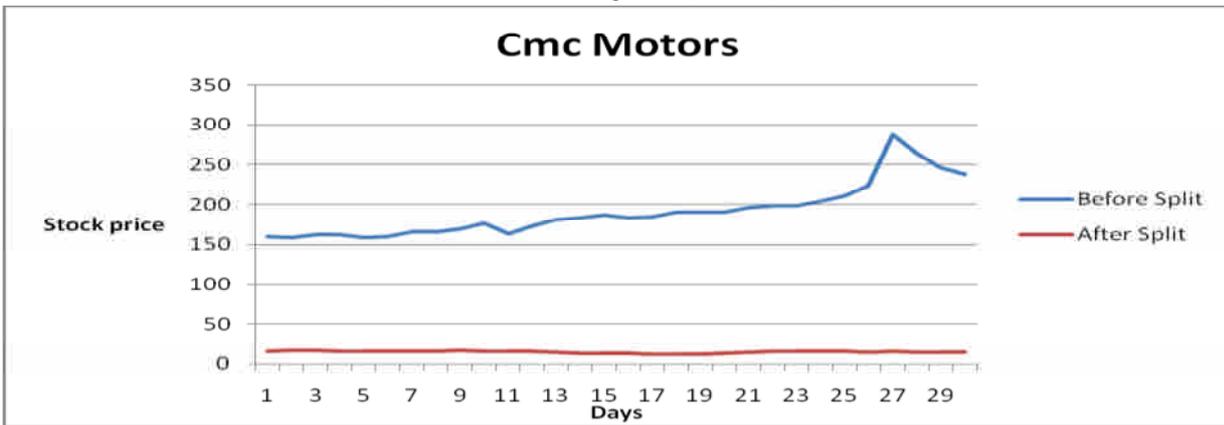


Figure 4.b. shows a plotted graph of stock price against days around stock split for CMC motors. It illustrates that high volatility on share price existed before the share split. It also shows that after the share split stock price showed optimality by trading at a relatively constant stock price.

**Table 4. Daily stock prices and Liquidity Ratio against Days around Stock Split**

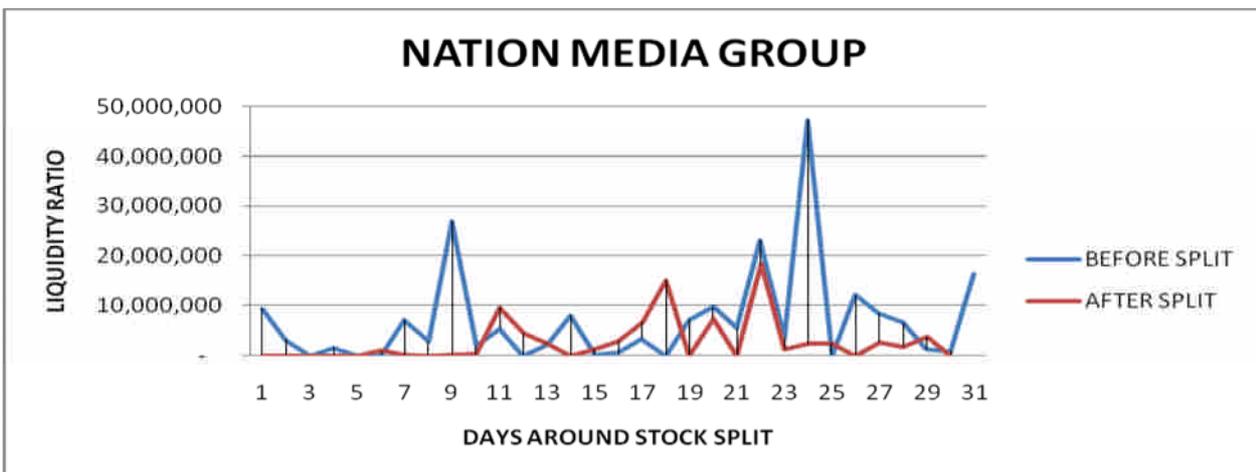


Figure 5.. It depicts how liquidity changed on days before and after the stock split. The above graph illustrates that the liquidity ratio of stocks of Nation Media Group was relatively higher in days before the stock split as compared to the days after the split. It can be noted that the liquidity ratio was relatively high just before split date and lowest after the split date.

**Figure 5 (b): Graph of stock price against Days around Stock Split for Nation media group.**

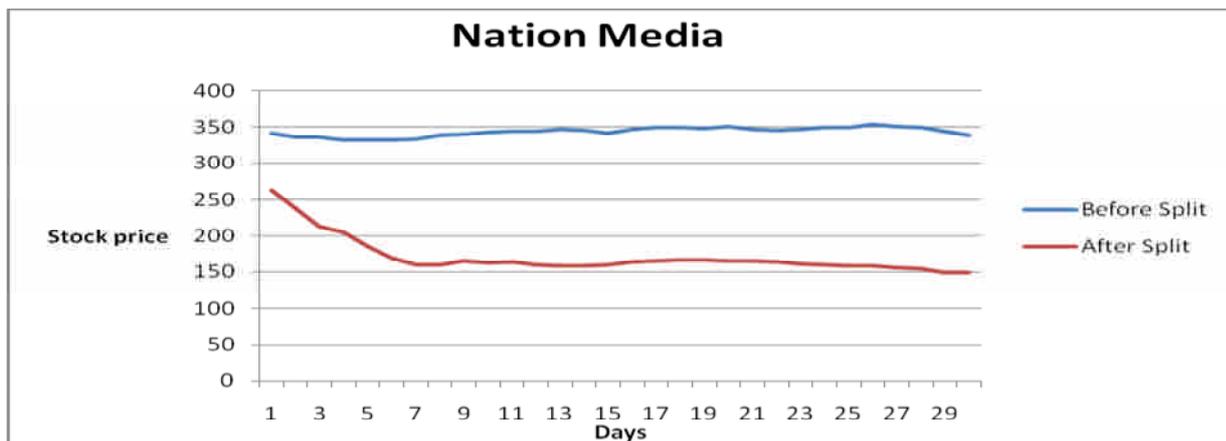


Figure 5.b. shows a plotted graph of stock price against days around stock split for Nation media. It illustrates that relatively low volatility on share price existed before the share split. It also shows that after the share split stock price showed optimality by moving from a high trading price to at a relatively constant lower stock price.

**Figure 6(a): Graph of Liquidity Ratio against Days around Stock Split for Kenol Kobil**

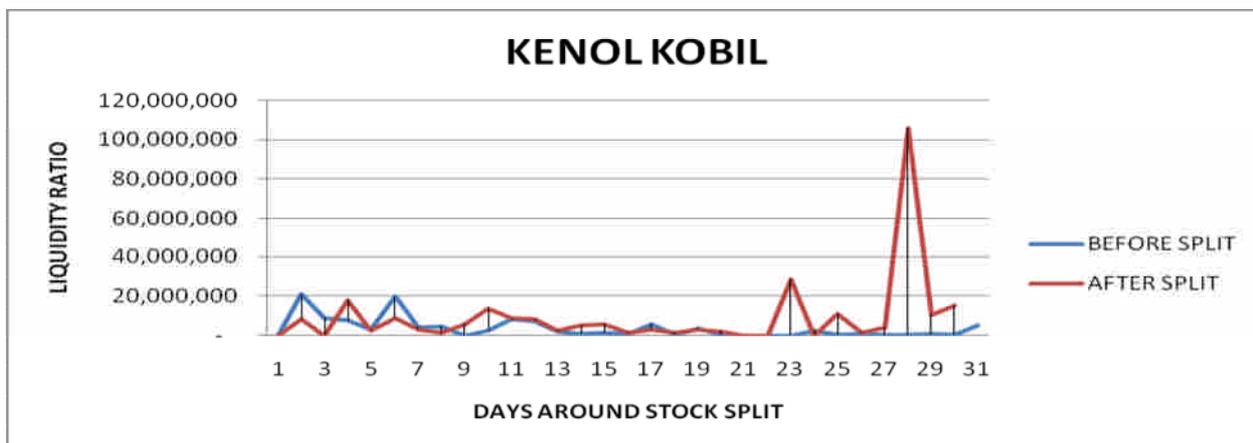


Figure 6.a. illustrates a plotted graph of liquidity ratio against days around stock split for Kenol Kobil. It reveals how liquidity changed on days before and after the stock split. The above graph

depicts that the liquidity ratio of stocks of Kenol Kobil was relatively higher in days after the stock split as compared to the days before the split. It can be observed that the liquidity ratio around the stock split was relatively higher before the stock split than after the stock split.

**Figure 6 (b): Graph of stock price against Days around Stock Split for Kenol Kobil.**

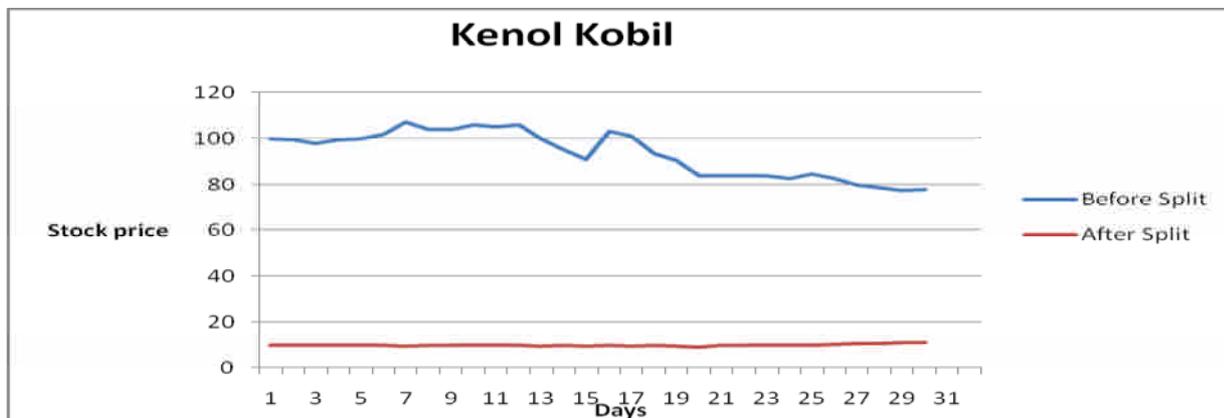
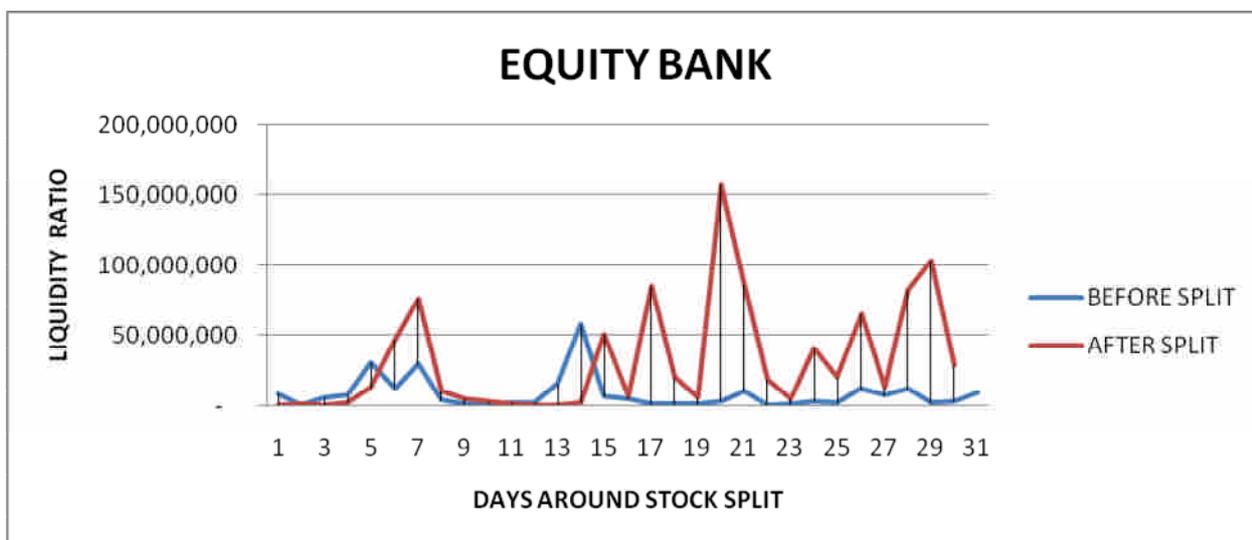


Figure 6.b. shows a plotted graph of stock price against days around stock split for Kenol kobil. It illustrates that high volatility on share price existed before the share split. It also shows that after the share split stock price showed optimality by trading at a relatively constant stock price.

**Figure 7(a): Graph of Liquidity Ratio against Days around Stock Split for Equity**



The above graph depicts that the liquidity ratio of stocks of Equity Bank was relatively higher in days after the stock split as compared to the days before the split. It can be noted that liquidity ratio was relatively low around the split date. The liquidity ratio just before the stock split was higher than just after the stock split.

**Figure 7 (b): Graph of stock price against Days around Stock Split for Equity Bank.**

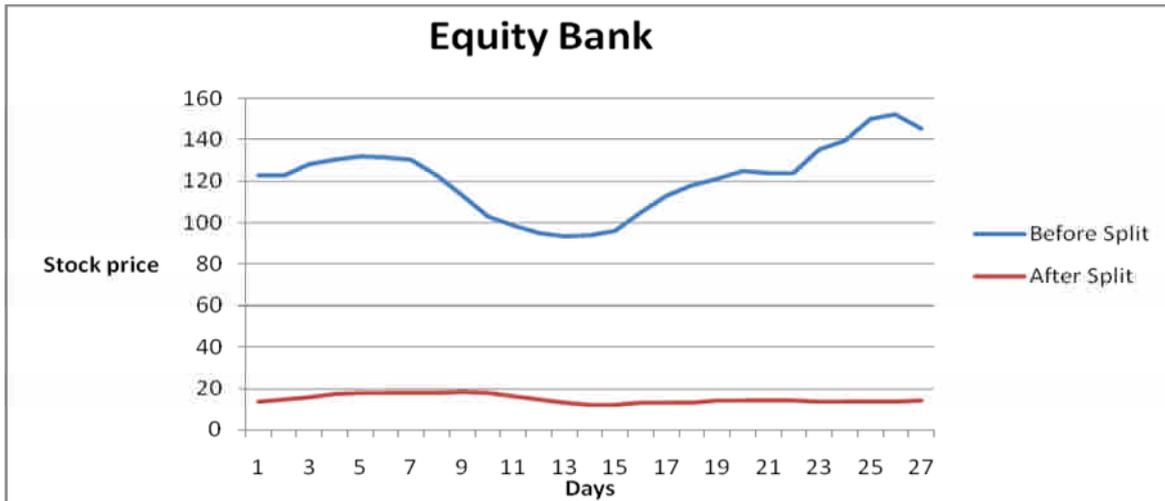


Figure 6.b. shows a plotted graph of stock price against days around stock split for Equity Bank. It illustrates that high volatility on share price existed before the share split. It also shows that after the share split stock price showed optimality by trading at a relatively constant stock price.

**Figure 8(a): Graph of Liquidity Ratio against Days around Stock Split for Barclays Bank**

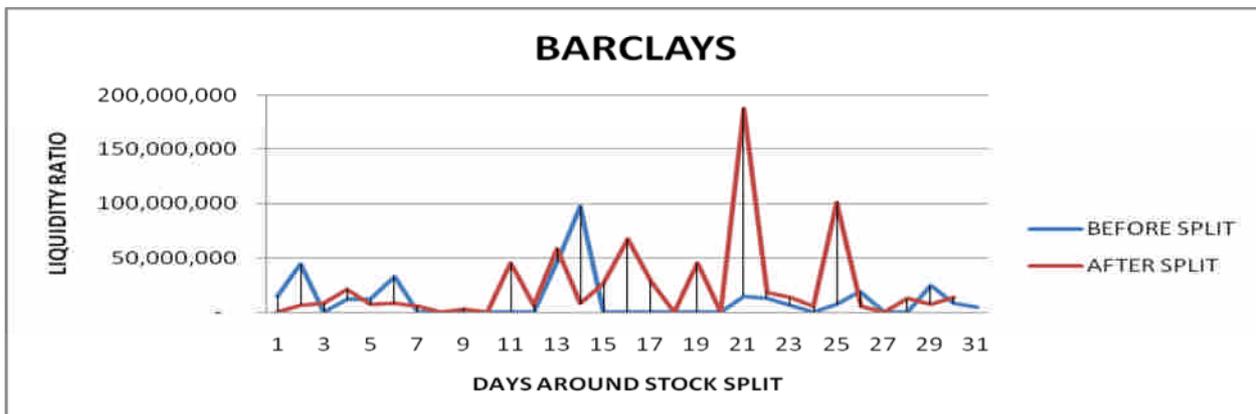


Figure 8.a. illustrates a plotted graph of liquidity ratio against days around stock split for Barclays Bank. It depicts how liquidity changed on days before and after the stock split. The above graph illustrates that the liquidity ratio of stocks of Barclays Bank was relatively higher in days after the stock split as compared to the days before the split. It can however be observed that the liquidity ratio just before the stock split was relatively higher than just after the stock split.

**Figure 8 (b): Graph of stock price against Days around Stock Split for Barclays bank.**

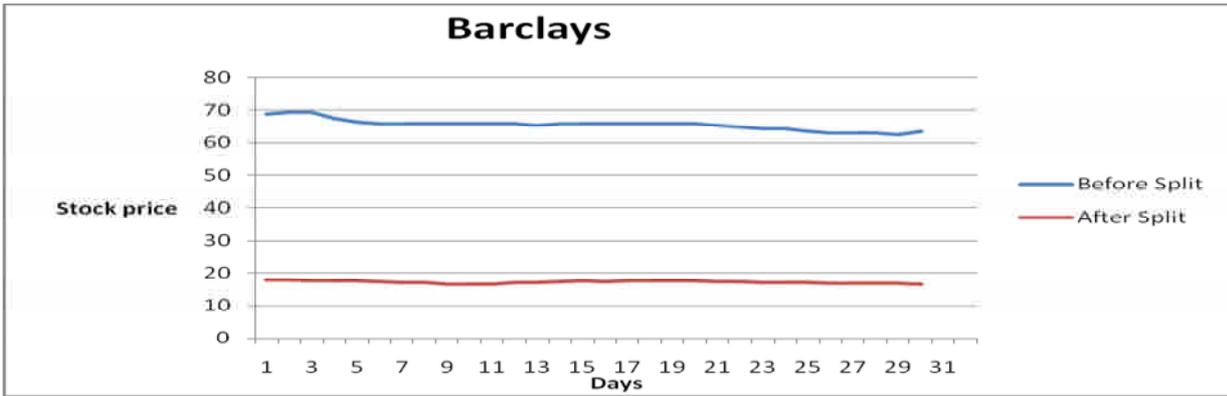


Figure 8.b. shows a plotted graph of stock price against days around stock split for Barclays bank. It illustrates that lower volatility on share price existed before the share split. It also shows that after the share split stock price showed optimality by trading at a relatively constant stock price.

**Figure 9(a): Graph of Liquidity Ratio against Days around Stock Split for KPLC**

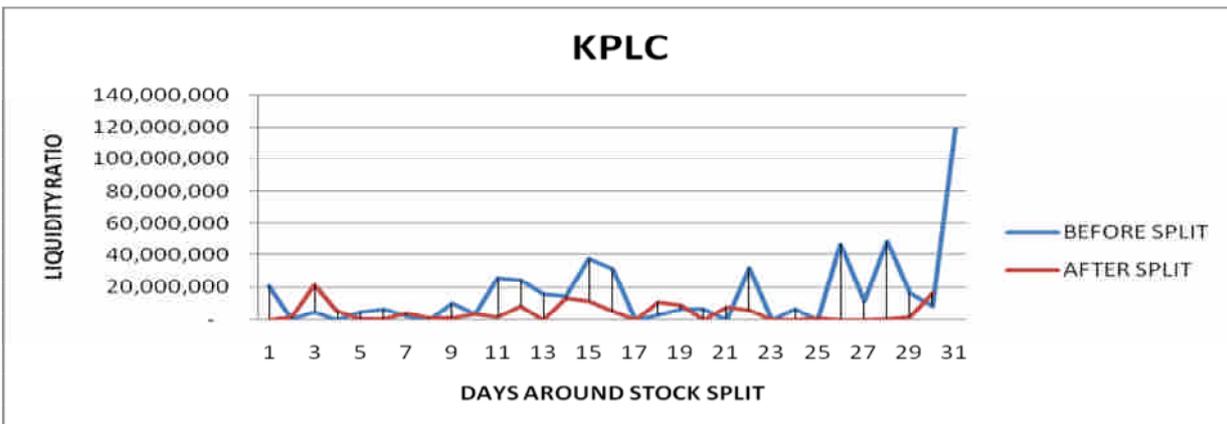


Figure 9.a. illustrates a plotted graph of liquidity ratio against days around stock split for KPLC. It depicts how liquidity changed on days before and after the stock split. The above graph illustrates that the liquidity ratio of stocks of KPLC was relatively higher in days before the stock split as compared to the days after the split.

**Figure 9 (b): Graph of stock price against Days around Stock Split for KPLC.**

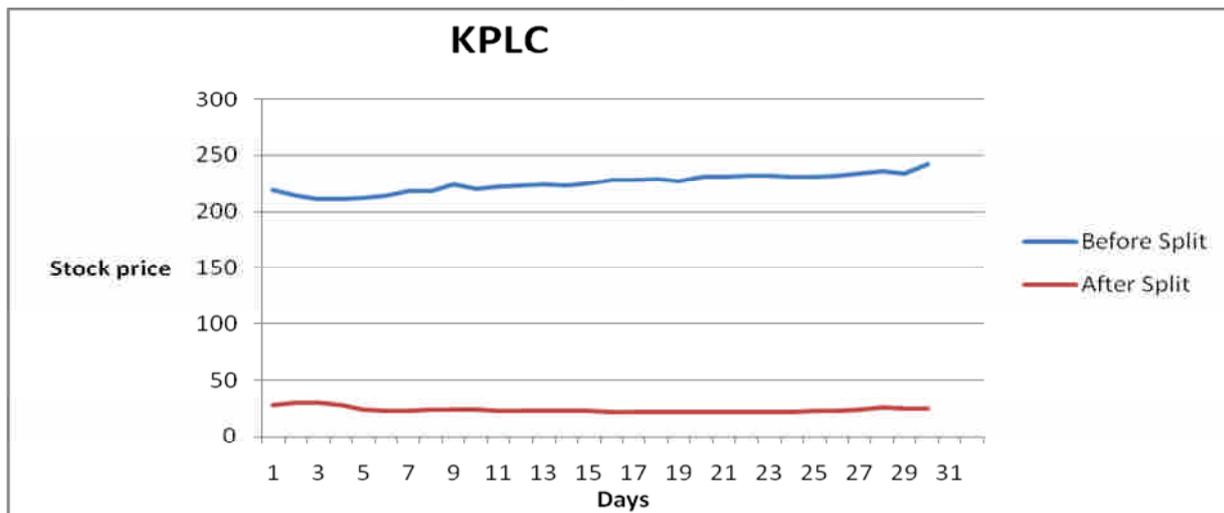


Figure 9.b. shows a plotted graph of stock price against days around stock split KPLC. It illustrates that volatility on share price existed before the share split. It also shows that after the share split stock price showed optimality by trading at a relatively constant stock price. The overall monthly liquidity ratios were also calculated for both the month before and after the stock split date. The table below represents the monthly liquidity ratios for various companies also the results were illustrated on the bar chart labeled figure 10 below.

**Table 2: Monthly Liquidity Ratios**

COMPANIES	BEFORE SPLIT	AFTER SPLIT
EAST AFRICAN CABLES	23,683,830	14,779,767
SASINI	5,584,325	381,687
CMC	8,977,131	2,108,994
KCB		

	35,224,371	5,577,720
NMG	6,947,875	2,934,294
EQUITY	8,036,994	32,384,090
KENOL KOBIL	3,709,043	9,760,832
KPLC	16,557,519	4,668,390
BARCLAYS	11,461,490	24,557,939

**Figure 10: Graph of overall Monthly Liquidity Ratios against the companies.**

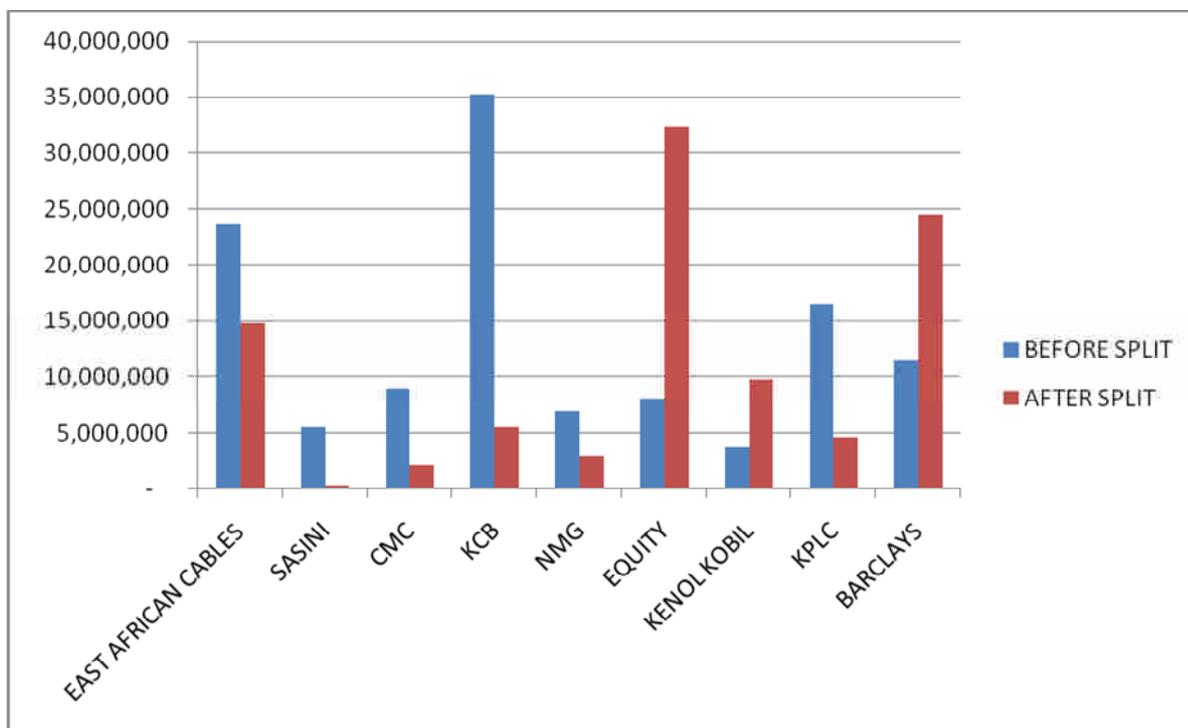


Figure 10 shows the collective monthly liquidity ratios for the companies under study. It shows the aggregate monthly liquidity positions both prior and after the stock split date. From the above

graph we observe that 6 out of the 9 companies under study have a higher collective monthly liquidity ratio before the split date as compared to after the split date. 3 out of the 9 companies under study have a higher collective monthly liquidity ratio after the split date as compared to before the split date

## **5.0 SUMMARY AND CONCLUSION**

The liquidity proxy used in this research was the Amivest liquidity ratio, which measured the total volume traded resulting from a 1% change in share price. The results denoted that generally there was a higher liquidity of stock in the days before the stock split as compared with the days after the stock split. A majority of the companies under study experienced the higher liquidity before the stock split, with the exclusion of Equity Bank, Kenol Kobil and Barclays Bank. It was also observed that stock liquidity tended to be the lowest in the days around the stock split with the exception of CMC Motors which recorded the highest liquidity instantaneously before the stock split event.

The results also depicted that stock price attained optimal levels by trading at a relatively constant stock price volatility of stock price was higher, for all the companies, prior to the stock split as compared days after the stock split.

For the monthly liquidity ratio, the researchers worked out the aggregate Amivest liquidity for both the month prior and after the stock split. The results showed that generally the aggregate liquidity in the month prior the stock split was greater than in the month after the stock split. This was with the exclusion of, Kenol Kobil, Barclays Bank and Equity Bank.

The research was designed to meet the research objective which was to determine the outcome of stock split on stock liquidity and stock price optimality. The study found that commonly there is higher liquidity recorded before a stock split than after a stock split and that as the stock split date approaches the liquidity of stock tend to be low. It also found that commonly there is high instability in stock prices before the stock split as compared to after stock split.

For the stock liquidity this is found to be inconsistent with the majority of findings discussed

earlier in this research which have recorded higher stock liquidity both around the stock split date and after a stock split as opposed to the period prior to the split.

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# Thai Tourism Industry Competitiveness in the Future: Perspectives to Current Tourism Industry, Competitiveness in the Tourism Market, and the Language Roles

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## Abstract

This qualitative study aims to explore the international tourist perspectives to current tourism industry in Thailand, to investigate the competitiveness in Thai tourism market, and to explore the language roles in Thai tourism industry competitiveness in the future. The study was based on in-depth, web-cam interviews with a convenience sample of 42 international tourists. They are from 23 countries. The results revealed that the sample have various ideas to Thai tourism competitiveness in the future. Competitiveness in Thai tourism industry does not depend only on price, place, and promotion. It also includes good service, efficient management, and marketing strategies. They are parts that help in Thai tourism industry competitiveness. Moreover, language is one of the important factors for Thai tourism industry competitiveness. The Thai tourism industry competitiveness in the future can be enhanced periodically. This research suggests that focusing on several factors by bringing into practice will certainly lead to competitiveness in the future.

**Keywords:** Competitiveness, Tourism Industry, Current in Tourism Industry, Future of Tourism Industry, Language Roles

## Introduction

Tourism is a part of a global process of change and development (Reyes, 2010; Rodrigues de Jesus, 2010; Sánchez & Jaramillo-Hurtado, 2010). Understanding the pace of change in tourism is more complex as forces of change are various (Marhuenda, Martínez, & Navas, 2004; Page & Connell, 2006; Trunfio, Petruzzellis, & Nigro, 2006). The changes which have occurred in international and domestic tourism globally (Ayres, 2000; Irvine, & Anderson, 2004) since past have been considerable. Factors such as AIDS, the Tsunami, SARS, Bird Flu, Swine Flu, the State Railway of Thailand Workers Union threaten long strike, and Thailand political crisis have a great impact on Thai tourism industry. Thai tourism industry cannot stay away from the impact. The case of AIDS, SARS, Bird Flu and Swine Flu illustrate how diseases can easily be spread by the global travel (Thitthongkam & Walsh, 2012), and it effects massively to the Thai tourism industry. It indicates that health is now a central issue in the operation of Thai tourism, especially given the media interest in negative events. It is true that Thai tourism industry tackles with various problems (Pleumarom, 1999) and many factors. The problems and factors involved, especially the number of the tourists as a source of demand for revenue. Not surprisingly, present Thai tourism situation seems quiet, number of international tourists drop. Under these circumstances, then, it is worth examining the future of Thai tourism industry in short term, medium term (3-6 years: from 2012-2015), long term (7-10 years:

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from 2016-2025), and very long term (more than 10 years: from 2026-2050) so as to see the trends it might take. It is because Thailand needs new methods of thinking about the development, management and operation of tourism as a national activity. Embracing many of the classic and popular concepts and approaches have become firmly pushed in the subject (Page & Connell, 2006). Page & Connell (2006) pointed out a number of good studies, including those by Henderson (2003) and Dobby (2003) who focused on tourism industries to reinforce the point of the ability of tourism to bounce back from the mentioned crises. There are numerous factors affect Thai tourism in the future (Chattananon & Trimetsoontorn, 2009; Diethelm Travel's Thailand Tourism Review, 2007). Planners and managers need to have special techniques. Those techniques include forecasting to ensure the short term, medium term, long term and very long term.

This study aims (1) to study the international tourist perspectives to current tourism industry in Thailand, (2) to investigate the competitiveness in Thai tourism market, and (3) to explore the language roles in Thai tourism industry.

With these objectives in mind, the paper is structured in three further sections. In the first part, a review of literature serves as a reference for analysis of the results. In the second part, the setting of the research and research methodology employed are described. In the third part, there is a presentation of the results and discussions obtained and the data analyzed in order to answer the research questions. Finally, conclusions of the empirical work are presented.

## **Literature Review**

This part presents the literature review related to ideas for the future of Thai tourism industry. The ideas help achieve short, medium, long and very long terms tourism goals.

### **Short Term**

In order to understand the potential for the future of Thai tourism industry in short term, it is important to consider tourism products such as culture and historical sites carefully. Throughout the country, the culture can be a part of the process in short term for developing tourism products (Jamieson, n.d.). Historical parks such as Sukhothai and Ayudhdhaya are good examples. This indicates that culture and historical sites are important for Thai tourism industry (Pungtomorn, 2007) to motivate international tourists in short term. However, the operation of culture and historical sites for international tourists needs to raise many completing and conflicting challenges for the planning and management of both tourism promotion and conservation.

According to the Tourism Authority of Thailand (2006), "Thailand Travel Mart Plus" was organized for recovering the situation. The consequence aims at connecting international buyers with sellers of tourist products and services from the Mekong destinations of Cambodia, Lao PDR, Myanmar, Vietnam and Yunnan, Southern China. There were buyers from main markets world wide attend the occasion. Most of the buyers are from the traditional visitor generating markets such as India, USA, Korea, Australia, Russia, Germany, Canada and Malaysia. This is a part of the Tourism Authority of Thailand's strategy to broaden the sources of visitor arrivals, and expose

the Greater Mekong Sub-region (GMS) to new buyers from countries and regions which could deliver promising results in short term.

Moreover, Thailand needs to find opportunities to discuss the latest market trends introduce new products and offer creative packages at value for revenues (TAT, 2009). In addition, Thailand is significant to design the country as a regional tourism hub, and the products within the Thai tourism industry which should categorize into (1) hotel and resorts, (2), tour operators and travel agent, (3) ecotourism and adventure, (4) wellness and spa, (5) airlines, (6) entertainment and cultural products, (7) golf courses, (8) associations, and (9) other tourism services. Another alternative, the Thai tourism products might be reclassified into seven clear categories (TAT, 2009; TravelDailyNews, 2008) as the “Seven Amazing Wonders of Thailand.” They are Culture, the land of Heritage and History, Sun and Serenity, the Beauty of Natural Wonders, the land of Year Round Festivals, and land of Great Medical Service.

Ichinosawa (2006) pointed out that a promotion for short term tourism industry, Thai tourism should involve:

- Focusing on festivals which as a largest travel and tourism showcase occasion that consists of an enormous range of activities to encourage the conservation of Thai culture, traditions and local way of life.
- Conducting scientific studies on impact of Thai tourism industry on income and employment through Thai tourism industry.
- Strengthening the collection of statistics on tourist arrivals, tourist profile and expenditures which is a way to help understanding Thai tourism in short term, so that solutions can be made right to the point.
- Pursuing sustainable Thai tourism development with focus on conservation and preservation of inheritance.
- Encouraging and getting community involved in the tourism planning.
- Offering more loans to private sectors to create more projects to motivate international tourists.

Another way to help boost the short term future of Thai tourism is a need for a proper communication campaign to the media for Thailand (Fam & Grohs, 2007). It is a survival way that the Thai tourism industry can run forward and communicate the right message (Johnson, 2009). Thai tourism industry needs to communicate the real and positive messages to the public, media and tour operators (Clulow, 2005; Lin, 2010) that Thai tourism industry is still a country that is safe (Moniruzzaman, 2010) and is ready to welcome international tourists. Another short term solution is taking a step back and perhaps using the model of another Asian country which had experienced some similar issues to Thailand.

With a general economy of Thailand taking a downturn and the phrase “sufficiency” being widely used (Atilgan, Akinci, & Aksoy, 2003), domestic tourism seems a marked change in the way in which international tourists take their holidays. Low cost tourism products with quality to reduce costs of visitors enable to improve

number of international tourists (Eraqi, 2006; Min, 2008; Valls & Sardá, 2009; Wynne, *at al.*, 2001) coming to Thailand.

In short, although the Thai tourism industry confronts with various problems and factors, but still, Thailand has some solutions that can help the industry to continue growing. Some solutions might be abstract ideals, however, paying more attention to them by taking into action will certainly help the Thai tourism industry progress.

### **Medium Term (3-6 years: from 2012-2015)**

The future of Thai tourism industry in medium term needs to consider what Thailand offers to the tourists (Kaosa-ard, 1994). In fact, Thailand is famous for historical sites, cultures, and scenic countryside, gentle, polite and friendly people. So, maintaining the Thai tourism in medium term should consider the issues.

The improvement of Thai Tourism in medium term, the private sector and the public sector need to be more active in term of working harder and working together. Recently, Thai tourism products are mostly a result of private sector investment and efforts (Brown & Kaewkitipong, 2009). Public sector should pay more attention in upgrading infrastructure.

The future of Thai tourism industry in medium term needs to focus on caring of environment since uncontrolled tourism destroys the environment and natural resources (Fam & Grohs, 2007). It is important that tourism development should go hand in hand with responsible natural resource management (Costa, 2004; Jackson, 2006; Valls & Sardá, 2009). Investors must realize the significance of the conservation and sustainable utilization of natural resources. Without them, Thai tourism cannot survive in medium term.

Also, preparing area development plan for the tourism destination and trying joint venture with major organizations within the Thai tourism industry helps create and develop infrastructure (Ateljevic, 2009; Balakrishnan, 2009; Brown, 2009; Glenn & Gordon, 2002; Martin & Williams, 2003; Sánchez & Jaramillo-Hurtado, 2010). It will benefit the tourism industry in medium term. In addition, getting more Thai graduates who are studying in international tourism institutions overseas back to Thailand to help the Thai tourism drive to meeting the future challenge, and make them realize that improving Thai tourism industry is more important than spending their time to create a better curriculum vitae with international experience (Pimpa, 2003).

### **Long Term (7-10 years: from 2016-2025)**

The future of Thai tourism industry in long term vision should accord with UNWTO tourism 2020 vision. Since the pace of growth from 2016-2025 will be slowdown because of the uncertainty of petrol price and other future factors (Williams & Ferguson, 2005) such as a changing of a business world, the global and local society, environment, natural resources, climate issues, multiculturalism, networked society, complicated lives, the anxiety society, and ethical consumption. So, the Tourism Authority of Thailand (TAT) needs to function as the main agency in coordinating all the activities related to tourism. TAT needs to develop mechanism to protect Thai tourism industry from diverse effects of several agreements such as General Agreement on Tariffs and Trade (GATT), the World Trade Organization (WTO), etc. The TAT also needs to observe educational institutions focusing on curriculum to create awareness among youths. Moreover, TAT should allow only approved tourism

units to function as tourism units in order to guarantee quality service within the Thai tourism industry. Creating and developing infrastructure through private sectors should also be taken in consideration. They will motivate private sectors to invest in more open and competitive environment (Ichinosawa, 2006).

For long term, in terms of pursuing sustainable tourism development with focus on conservation and preservation of heritage, Thai tourism needs to establish systems and procedures to enforce and include core components of sustainable Thai tourism development (Lebel, Khrutmuang, & Manuta, 2006). Importantly, developing the northeastern part and the southern part of Thailand to become new highlights, the more-known region to attract international tourists is a must if Thai tourism industry intends to grow within the industry and be able to compete. However, the future of Thai tourism industry expansion internationally is based largely on relationships. Creating network relationship with organizations (Freeman & Sandwell, 2008) related to tourism industry in target countries where can motivate and attract international tourists will also help Thai tourism in long term.

### **Very long term (more than 10 years: from 2026-2050).**

In very long term, the future of Thai tourism industry is bright because international tourist arrivals are forecast to grow (TAT, 2009), although expenditure is expected to grow at a slower rate. The TAT and other Thai government agencies, in particular the Board of Investment and the Export Promotion Department and Foreign Affairs Ministry together need to help promote trade and investment within Thai tourism industry.

The key drivers of the positive expenditure forecasts in Thai tourism industry for very long term include the likely weakening of the Thai baht (Ryan, 2000), positive economic outlooks in the majority of Thai key markets and increased emphasis on quality (Panvisavas & Stephen, 2006) in terms of tourism products in Thai tourism industry. Other key highlights include: Chinese arrivals are forecast to increase by 2026; surpassing visitors from China should become Thai tourism largest market by 2026.

In very long term, all regions in Thailand should be expected to increase their tourism performance. Regions with higher exposure to international markets such as Phuket, Chiang Mai, Pattaya, Udonthani, Nongkai, Songkhla, and Suratthani are generally expected to perform above the national average. Ability in performing of all regions will help Thai tourism strong and stable growth (Brown & Kaewkitipong, 2009). The challenge issue, however, remains to manage Thai tourism resources with the increased pressures associated, and to continue to strive for even great quality across the sector.

Expecting good performance in all regions in Thailand is not the only possible. A future where tourism benefits local economies and respects the environment is also possible. The harder working of several tour operators will help long term Thai tourism industry strategic planning. By then, Thai tourism industry should not be blindsided by roller coaster fuel prices and the economic downturn.

The future of Thai tourism industry in very long term is based on key areas such as the environment, community, infrastructure and finance (Ichinosawa, 2006), It also includes tourism education (Thitthongkam & Walsh, 2010a). I also includes tourism education (Thitthongkam & Walsh, 2010). They can help enhance

profitability and highlights best practice. It serves as a guide for tour operators, developers, hoteliers and other tourism providers involved in building new products or services.

In very long term, an increased leisure time, paid holidays and developments in transport inspired and enable many travels, expanding the geographical extent of domestic tourism in Thailand. Thailand will have better transport connection to neighbor countries (Pomlaktong & Ongkittikul, 2007), and it is a hub for air and land transportation in the region. They will help Thai tourism survive smoothly. Greater internationalization, changes in technology, development of Thai tourism market, research and information will also a part of Thai tourism industry's development in very long term.

In the same mode, the better utilize of technology (Buhalis, 2003; Thitthongkam & Walsh, 2010) means that more meetings and seminars will be held in offices rather than conference centres. Smaller communities that have based their economics future on seminars may find themselves in every demanding financial situation (Tarlow, 2002).

Surly, new communications technology will continue to increase the intensity of personal communications (Bigné, Aldás, & Andreu, 2008; Chalkiti & Sigala, 1989; Wong, & Kwan, 2001) between family members and their extended social networks, which in turn will result in greater numbers of trips to Thailand to see friends and family living Thailand. However, still, the Tourism Authority of Thailand, the very long term future of Thai tourism industry should be under the following policy and marketing plan (TAT, 2006).

- Promote the tourism industry to be an essential channel in tackling the nation's economic crisis, generating employment for citizens as well as increasing revenue for the country. Moreover, marketing should be done to make tourism take part in a vital role in the improvement of the quality of living in all areas of Thailand as per the plan of the government (TAT, 2009).

- Promote and extend the action on positive marketing strategies for increasing the new markets as well as the niche markets. This is in order to magnetize more quality international tourists to stopover Thailand.

- Encourage collaboration in all stages domestically and internationally on encouragement for the expansion of tourism markets. This aims to get rid of all hindrances in the tourism industry and cover the tactic for Thailand to be the tourism centre of Southeast Asia.

- Focus on business and managing development as well as improvement of the human resources' skill to generate a capable driving force in the action.

- Concentrate on increasing the potentiality on international rivalry under the good governance as well as developing the strength of the organization on its practical roles as well as expertise on marketing.

- Accelerate the improvement of a tourism technological practice for accommodating industry activities information (E-Tourism) on the Internet. Included here is also the carrying out of electronic business with applying information technology in marketing. The crucial mechanisms on controlling and protection have to be in place to guarantee anticipation of inconvenience.

Factors such as political and economic events (Ichinosawa, 2006), the rise of a consumer society, changing products, environment, petrol prices, high interest rates, the costs of servicing debts, social and political instability (Hall, 1998) and value of exchange rate certainly still influence the future of Thai tourism industry in very long term. To succeed in the very long term, the industry must overcome and be able to understand with the factors (Tarlow, 2002:48).

An aging population is another interesting point. They will have an effect on the Thai tourism future in very long term. Aging populations in most developed countries will bring about change in the Thai tourism industry with the expectation of the following trends:

- There are more aged international tourists travelling with their grandchildren.
- Aged international tourists and the fear of disease will lead to more going away from large cities, visiting rural tourism spots instead.

By the year 2050, universities in Thailand may become centres for foreign travel. They offer a relative secure and vigorous surroundings, offer inexpensive housing and meal programs, are centres of multicultural education, educate targeted courses for people already in the workforce, and can quickly prepare individuals in language and communication skills (Tarlow, 2002:48).

The government as a catalyst and facilitator for the growth of Thai tourism industry needs to set up a clear policy so as to help drive Thai tourism growth in very long term. Creating awareness and tourism consciousness (Jamrozy, 2007) among people who involved in the Thai tourism industry, including tourism investors, tour operators, taxi drivers, policeman, educators, customs and immigration officers will help the future of Thai tourism industry.

Promoting tourism in Thailand in very long term based on carrying capacity of the destinations, to conserve and preserve (George & Henthorne, 2007) the Thai art, culture and heritage of the nation, to build up and promote new innovative tourism products, arts forms, cuisines, monuments and handicrafts to identify, conserve and preserve special tourism zones (Calling, 2002:2).

Undoubtedly, there will be very strong competition in the tourism industry in very long term. Thai tourism has sufficient accommodation facilities, both in quantity and quality. Also, Thai tourism by the year 2050 is full of experience in tourism management. There is no problem with labor costs within the Thai tourism industry. The future of Thai tourism industry is positive in terms of managing infrastructure throughout the country. It indicates a good opportunity for the Thai tourism industry in very long term.

## **Research Methodology**

This study was based on in-depth, web-cam interviews with a convenience sample of 42 international tourists. They are from 23 countries around the world. They include the United States of America, Australia, England, France, Singapore, China, Denmark, New Zealand, Switzerland, Brazil, Canada, Germany, India, Israel, Japan, Laos, Malaysia, the Netherlands, Norway, Portugal, Saudi Arabia, South Africa, and Uganda. They have

been touring Thailand on an average of 19.9 days. They visit Thailand up to 12 times, once or twice per year. They visited Bangkok, Chiang Mai, Pattaya, Nakhon Phanom, Khao Yai, Chang Island, Kanchanaburi, Suratthani, and Krabi.

An interview guideline was created as a research instrument by the researcher. After designing the interview guideline, an international tourist pilot interview was conducted with a tourist who used to visit Thailand, and used the services of tour companies. There were two major reasons for choosing this interviewee. Firstly, he was experienced in dealing with Thai tourism industry. Although he was at the age of 60s, he still dealt with Thai tourism industry as an international tourist. He therefore provided the researchers with insights related to the research objectives. Secondly, this person was convenient for the researcher to contact and interview. Interviewing guideline was used to encourage the interviewee to expose his experiences of dealing with Thai tourism industry, trying to point out about the Thai tourism industry competitiveness in the future. Roles of language in Thai tourism competitiveness were also mentioned. As Janesick (1994), Pan (2004), and Yin (2009) stated, the pilot data provides considerable insights into the issues being studied. The interview guideline as the research instrument was adjust and designed accordingly.

Then appointments with international tourists via e-mail requesting interviews were prepared and scheduled. Interviews were conducted entirely on web-cam and the interviewing process averaged approximately 45-125 minutes each.

There are limitations to this study which should be noted. That is the informants might not represent the perspectives of each nation since a few samples are from each country.

Future research would benefit from larger sample. Different aged groups, countries, careers and length of stay in Thailand should be categorized. This paper presents only some of the findings collected from the research. The findings concentrate on the international tourist perspectives to current tourism industry in Thailand, the competitiveness in Thai tourism market, and the language roles in Thai tourism industry in the future.

## **Results and Discussions**

The research results are divided into three sections: (1) the international tourist perspectives to current tourism industry in Thailand, (2) the competitiveness in Thai tourism market, and (3) the language roles for Thai tourism industry competitiveness in the future.

### **International Tourist Perspectives to Current Tourism Industry in Thailand**

Tourism industry in Thailand has become the leading source of foreign exchange, and plays a positively important role in the Thai economy. Thailand perceives tourism as a fast route to economic growth. It is assumed that the tourism development requires less investment than other industries, and it is believed that tourism is an effective means of creating job opportunities and flourishing local income.

Thailand is the informants' preferred country in Southeast Asia. It is easy to travel, compared to other Southeast Asia countries because of the infrastructure. The attractions are easily reachable. Importantly, the Thai people can speak English well. This makes the Thai tourism industry very informative. The informant observed that Thai tourism industry is well developed. The staff at most places is not only competent with language skills but also friendly and helpful.

Focusing on the price level compared with other Southeast Asia countries, it is still moderate though it was noticed that the price level is quite a remarkable increase. However, the price issue is still disorganized. There should be more standard controls on prices. Regardless, generally, the informants had chosen Thailand as their tourism destination because it is very competitive.

Moreover, tourism industry in Thailand has now become one of the biggest world centres mainly through its tourism facilities. Tourists from across the world come and board in Thailand in search of colour, rhythm and life. The hotels in Thailand are simply awesome. They provide the tourists the best services imaginable. There are branded hotel chains like Hyatt, Marriott, Sheraton, Central Sofitel Grand and Hilton Hotels.

There is a very large range of hotel quality from basic to extravagance ones which can fit any kind of international tourists. The situation is the same for restaurant and all the food and beverage. Bangkok, the capital is a vivacious city full of lively and colorful people. Most informants said that Bangkok is a tourist's paradise. It is easy to get around. There are modern amenities available. People are very friendly and helpful.

Likewise, the informants felt that the tourism market is not at its height that it could be. It seems to be focused on Bangkok, Phuket, Pattaya, and Chiang Mai with the attractions are only bar girls and cheap market shopping, especially prostitution and the growth of the sex trade to satisfy international tourists, many of whom come to Thailand on sex tour package trips. It is the wrong way. They know there is more to that as Thailand has a beautiful natural country and wild life.

The informants pointed out that Thailand owns the ideal of service minded determination, and sustainable tourism promotion that would strengthen the continued existence of the country's beautiful and unique culture. Thailand is an independent business growing. Most of tour companies in Thailand are considerable for the best promoting of Thailand. Consequently, promoting Thai tourism into the future, greater efforts must be made to implement environmentally sustainable tourist policies and programs.

People around the country are pleasant and good relations. The Thai tourism industry is considered a mark of quality assurance for tourism products. Thailand's tourism meets international ideals because of the low cost tourism products with quality. This is consistent with Eraqi (2006), Min (2008), Valls and Sarda (2009), and Wynne *et. al* (2001) when they pointed out that low cost tourism products with quality are enable to improve number of international tourists. It has gained popularity from tourists all over the world for its quality and variety of tourist attractions. It is also as the greatest shopping venue and ranked the uppermost value for money tourist destination. Besides attracting more quality international tourists to visit Thailand, the informants have heard that the Ministry of Tourism and Sports has also established campaigns to support the Thai tourism in the market by promoting tourism as a part of people's life. To the informants, Thailand has many beautiful places to visit. The

tourism of the beaches, mountains, museums, shrines, culture, and historical sites which are consistent with the research conducted by Pungtomong (2007) which make Thailand a sought after location to visit. They are thriving and very inviting.

The informants pointed out that technology is another element that makes the Thai tourism industry has grown. The improved technology for example, the invention of airplanes has made it easier for people to travel. They can travel directly from Australia and Scandinavian countries to Phuket. Also, there is an International Airport in Samui Island, Suratthani. Besides, flights are cheaper and more people are able to afford.

In terms of competition, the tourism industry in Thailand is very competitive. A lot of different people and companies are selling the same tour, but with different prices. The informants said that there was a lot to choose from. One of the informants pointed out his wonderful experience as follow:

*"I went there with my friends for an amazing 6 weeks in Thailand. We started off in Bangkok then headed to the most amazing island known as Samet Island (the place we would visit 3 times in our trip) then headed to Chiang Mai which is the old capital of Thailand and it is much nicer and cleaner than Bangkok by far! Then after Chiang Mai we headed back to Samet Island then to Kanchanaburi and the home of the infamous bridge over the River Kwai, this city is covered in history albeit not great history. After we headed to the Islands down south we went to Tao Island (Turtle Island!), then to Phangnan Island for the full moon party and then to Samui Island. Then we headed back to Samet Island to celebrate my 21<sup>st</sup> Birthday in style with all our amazing new friends whom I miss everyday! I think what made Thailand so special to me is all the amazing people I met in the time I was there. They are always smiling no matter what happens. They don't appear to have much but they are content and so family orientated. I love that about Thailand! I will most definitely be heading back there and in particular Samui Island in Suratthani! That is where my heart truly lies!"*

The weakness points are about lacking of taking care of natural beautiful and tourism zone development. The informants pointed out that there is a slow death of the tourism industry of Thailand because Thailand does not take care of its natural beauty and soon will only rely on the sex industry. Tourism industry in Thailand is very well developed in some parts of the country such as Bangkok, all the other major cities, the coast areas and the islands.

At the same time, the informants noticed that Thailand is suffering from many of the negative aspects of tourism, including drug addiction, erosion of traditional values, increases in the cost of living, unequal income distribution, pollution, and environmental degradation, its own political disorder, prostitution, and AIDS. Sex tourism is growing, offering guided sex tours to show the tourists where many children and women are involved in the sex.

The informants said that there were various points that Thai tourism industry needs to emphasize; safety, natural resources, health, adventure resources, and cultural resources. Safety is important to international tourists. For example, in destinations where scuba diving is popular, it is important to make tourists feel positive. Know how to rescue, and meet internationally accepted principles. Safety for the tourist is generally good, but recent political riots throw a dark shadow over this first impression.

Although in reality, the situation in Thailand is not too bad. Tourism industry people have to work hard in this climate (Thailand's political and worldwide economic) to motivate the international tourist to visit Thailand. Without political problems, Thai tourism industry can make a lot of revenue to the country.

Natural resources should be well managed and not exploited, will earn high praise from adventure tourists and sustained market competitiveness. Health is also an important issue, so healthcare should be readily serviceable are better able to support adventure tourists. Adventure resources are easy to find in Thailand. This includes activities of bird watching, mountaineering, rafting, and rock climbing. Thailand as destinations with points in mind will keep a market opportunity and held competitive advantage. For cultural resources, the informants are as the international tourists keen to learn about new cultures as they are to explore nature. Being able to experience local culture is an authentic form, they emphasized.

Moreover, the informants consider that tourism is one of the major economic sources in Thailand. It offers better services. The country is proposing the international tourists exclusive benefit packages similar to departmental markets, golf holidays and medicinal facilities.

Again, considering the problems, Thailand has experienced over the past years; the industry has made a great deal in trying to bring tourist back to Thailand, and tried to promote Thailand the most popular tourist destination in Southeast Asia.

Visually gilded temples, exotic foods and gracious, smiling people. Land of smiles is a common description of Thailand that they have heard. They think Thailand has much to offer - from beautiful white sand beaches in the South to trekking among the hill tribes in the North. The increasing ease and inexpensive price of traveling to and within Thailand, has led to a major increase in the number of tourists flocking to this Southeast Asian nation annually. Unfortunately, the negative environmental, cultural, and biological impact of tourism in Thailand is increasing, as the government has been fairly lack in dealing with the numerous problems. Also, Thailand is seen as being concentrated in small thing. An important issue related to Thai tourism industry that the informants know is prostitution.

It is not too far from sustainability, Thai tourism industry needs to engage each stakeholder and, of course, need to think about economic issues since the Thai tourism industry is the pillar of its economy. The government of Thailand should make all the effort to develop and promote it. The strength of Thai tourism industry is also the driver of the property market in the major resort areas. The most popular resort destinations are Chiang Mai, Pattaya, and Suratthani. Improving Thai tourism industry is not only an ethical matter. It is also good for the economy because a flood of new hotels have opened their doors only to the world. Interestingly, they noticed many international tourists walking on street around Bangkok. This shows that Thai tourism industry is not too bad.

### **Competitiveness in Thai Tourism Market**

As the international tourists, the informants defined competitiveness in tourism market as the competence to attract people to a location and treat in its resources. The competitiveness focuses on price, place, product and promotion. Price is the most significant element. Competitiveness in the tourism market is where everyone wants to

get the foreign currency that is available into the market or business. The promotion is another basic of competitiveness in Thai tourism market. Agencies run the promotion to attract the international tourists such as accommodation, massage and spa and/or air ticket. That is a good idea in general, especially for international tourists themselves. It is not only the “price”, “place”, “product”, and “promotion”, but also the “service”. Good services should be a principal. Many tour companies and hotels offer services with different prices.

Moreover, Thai tourism industry is very competitive for international tourists who are interested in another culture. The Buddhist philosophy forms the character of the Thais, and makes a stay in Thailand relaxing and inspiring. Many countries compete against Thailand in this region, but the informants feel that Thai tourism industry has a better advantage of them all. Thai tourism industry also owns the beautiful countryside, beaches, and islands with clear blue water. In order for Thai tourism industry to maintain its competitive advantage, Thai tourism industry needs to eliminate the negative aspects that hurt tourism. In turn, Thai tourism needs to offer more than other countries that offer similarly.

Furthermore, Thai tourism industry is competitive which may result in the achievement of goals to reinforce the Thailand brand, maintain and expand the marketing base, as well as increase the competitiveness of Thai tourism industry in the world market. For what the informants can observe, Thailand offers a wide of activities to suit tourist on any kind of travel budget. Many tour companies and e-commerce websites around are offering different tour packages at very competitive rates.

Correspondingly, it is very comparative business market. When the informants wanted some air ticket, tour company and hotel, they searched so many sites. All tour companies had different prices. The price that airlines offer, tour companies offer, hotels offer and online offers are too competitive. Customarily, due to the different rates, they have to book air tickets, tour companies and hotels separately from different sources.

In addition, what seems competitive for the informants is an affable price, with friendly people, and clean hotel. The tour companies and hotel provide a good service to customers. Tour companies know their competitors. They do what others never do. They do not stop developing and getting to know their customers as well.

To the informants, there are too multifarious tour companies, so it is really hard for them to judge which company should be the best one. Still, the most important tools for marketing in this industry cannot be anything else but the Internet. The tour company who knows how to promote their website will be the one who gets the most market share.

Truly, Thai tourism market is certainly a very large field with high competition in marketing segments. In the real world, in terms of tourism competitiveness, Thai tourism industry has focused the criteria: safety and security, health, infrastructure, information and communication, technology, price competitiveness, cultural and natural resources, air and ground transportation. Encouraging competitiveness in terms of management and service quality in diverse areas of the tourism industry for benefits in marketing as well as sustainable conservation of the natural resources, environment, as well as culture is needed. These support previous researchers (Ichinosawa, 2006; Pomlaktong & Ongkittikul, 2007)

In negative view, the informants indicated that if somebody is interested in sexuality, then Thailand is special. Some Thai hotels are slow to react to market conditions - when tourism is low they are loathe flexing their prices.

The competitiveness in Thai tourism market should embrace four areas; first, the quality of service compared to the price paid for that service. Second, it is the variety and amount of the infrastructures such as hotels, restaurants, and transportation. Third, it is the variety and amount of tourist activities. This includes places to visit and things to do. Lastly, it is the diversity of foreign languages that can help the international tourists. The informants do not think, enough is done to attract and intense competitiveness in the Thai tourism market. Price, place for sightseeing and service should be appropriate. Importantly, competitiveness also has to have honesty and competency in language skills of tourism staff.

Concisely, the tourism market is very competitive universally. Becoming competitive in Thai tourism industry, effective management and marketing strategies are important. Adopting a market orientation enables a destination to better meet the needs of the potential international tourist and adapt accordingly to the dynamic nature of the tourism industry. It is certainly directly associated to an establishment ability to speak multiple languages, the more languages, and this will lead to more competitiveness.

### **Language Roles**

Language helps communicating among people of different races, cultures, religion and lifestyle. Foreign language is important. If we have foreign language skills, we will have a chance. As international tourists, learning the basics of the local language is advantage. The informants show at the same time, the appreciation of the culture of the host country often opens doors to unexpected experiences with the nice local people. In the remote area, the informants revealed that sometimes they used nonverbal language when people did not understand their talks.

In order to survive in this competitive industry, language is believed to be one of the most important factors which creates successful communication. Language helps to understand each other better. Having more freedom to do things and can access deeper in a destination country. It makes international tourists feel confident to spend their time within the country. Creation of familiar environment for international tourists and ensuring all the informants' needs are met. It will also help in building rapport and hence attract more people.

Again, the most important language for international tourists' base is English. Regarding the attractiveness of Thailand, for other Asian countries, the informant said that Chinese, Japanese, and Korean could also be important. They emphasized that foreign language skills by the tourism industry employees is a major factor to increase the number of international tourists.

Moreover, language plays a role in assistance, guidance, purchase transaction, and understanding events and sites. When international tourists need to go to the bathroom, they need some assistance. When they are giving a tour and showing people, they need some guidance. They sometimes want to buy things. Understanding event when they see shows as an example.

Language is important to the informants as the international tourists because it allows them to communicate with the native Thai on a more personal basis, and makes the trip more enjoyable.

Being able to communicate in various languages can gain the most vital advantage, as people would always prefer to communicate in their born or mother tongue. The most important language role is to communicate successfully. This includes, know how to help international tourists understand and use the service and or products. Being able to communicate globally gives the informants a competitive edge. As the international tourists, some of the informants depend on the Thais understanding and speaking English. When the informants travel, they like to ask questions. Using English for making conversation helps opened them many doors to local families, which in some cases resulted in long-term friendships. The informants are able to enjoy themselves more and will end up with a more positive feeling about Thailand. The more the people can speak international tourists' language while traveling, the more enjoyable the visit they have. The more they will consider turning in the future. This is what the tourist industry is looking for, repeat visits. These language roles help to create competitiveness in Thai tourism industry.

Focusing on language barriers, the informants did not face many language barriers due to the eagerness of the majority of Thais who like to learn English. However, in some remote areas where are not so influenced by tourism, it happened that the informants reached a limit. For such cases they always carry a dictionary or translator machine with them and if needed, they can show to the people the word they mean. Very seldom, they met people who were not able to read or write. The informants indicated that non-verbal language becomes useful when verbal language does not work. One says, *"I can't expect my language to be spoken everywhere. But if the industry has competent translators, this solves the problem."*

As international tourists, they do not speak the local language, then language barriers happen all the times in every country in the world. To overcome the barrier it is possible to use non-verbal communication or to have a dictionary with them, and sometimes, they practice with their Thai wives.

Competitiveness in tourism industry occurs when the people are polite, giving as much information as possible. One of the informants says:

*"Language plays a tremendous role in tourism competitiveness. For example, I used to live in Chiang Mai, a province where is also trying to expand its tourism industry. A much larger percentage of people in Chiang Mai speak English, which makes communication easier in Chiang Mai than in some provinces. However, many tourists (including myself) do not expect a host country to speak fluent English in order to accommodate them. I didn't mind the communication barrier, because I was happy to observe and be fully immersed in the natural, more traditional culture."*

In any case, the major factors of competitiveness are the quality of service compared to the price paid for that service, the variety and amount of the infrastructures (hotels, restaurants, transports), the variety and amount of tourist activities (places to visit, things to do). The international tourists will be more attracted to visit Thailand and feel comfortable to stay or come back if they know they can easily communicate with the people employed in the tourist industry or with the whole population. Language would be the decisive factor in breaking communication

barriers and enhances the probability of attracting higher international attention, therefore increasing tourism competitiveness of a country.

Certainly, language competence is considered important to the informants as the international tourists because language competence is the key to communication and understanding each other. This is, especially for people from different cultures. Understanding of what, where, how or why will get the informants to do or go or buy. Language competence helps reduce stress, and makes the informants enjoy travelling, so they can relax. Language helps the tourist feel more comfortable. This is the main reason they have holidays.

Most of the informants preferred to go to a place with English than to a place that cannot speak English. One of the informants says,

*“I was almost always with a Thai young adult who spoke fluent English who could help me communicate with whomever I wanted. I never felt uncomfortable despite poor language skills.”*

*“You know many people don’t like to go to other countries because of the language, in Thailand also. If you don’t know English you go somewhere, you will not stay there for a long time because no one will talk with you. You will get bored, and then you want to go back to your home country.”*

As mentioned, the most important language role in Thai tourism industry competitiveness is to communicate successfully. However, language roles do not only play role in communication but also play roles in creating understanding of culture, customer satisfaction, demand, motivation, and playing roles in international and external communication.

## **Conclusions**

The future of Thai tourism industry competitiveness is unpredictable, but planning to confront with any situations will help to complete in the future. In the future, customer service quality is no longer a source of competitiveness as all leading organizations have adopted it. Having a sustainable source of competitive advantage, organizations within the Thai tourism industry must create a unique and memorable experience for international tourists. If Thai tourism industry wants to continue to grow and compete, the Thai tourism industry needs to pay attention to tourism performance in all regions, keys areas such as environment, community, infrastructure, finance, language and communication, technology, policy and marketing plan, and other factors. In addition, the industry will have to find ways to provide safe, secure, and convenient travel experiences. Otherwise, Thai tourism industry will come to the end.

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# **EFFECT OF BUDGETING ON THE PERFORMANCE OF NIGERIAN MANUFACTURING INDUSTRY**

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## **Abstract**

This paper is on the effect of budgeting on the financial performance of manufacturing industry in Nigeria. Four (4) manufacturing companies listed in the Nigerian Security Market were randomly selected. Data for the study were obtained from secondary sources, specifically from the companies' audited annual reports. Pearson product moment correlation was used for the analysis. Findings revealed that in most of the cases considered, the presence of strong relationship between turnover as a variable of budget and performance indicators – EPS, DPS and NAS of the selected companies was established. Following the findings, managers and business operators in the manufacturing industry were advised to pay more attention to their budgetary control systems as this will go a long way in repositioning the manufacturing industry from its current creeping performance level to an improved high capacity utilization point.

**Key Words:** Financial Performance, Budgeting, Capacity Utilization, Manufacturing.

## **1. Introduction**

Nigeria is a developing nation which must develop her real sector in order to realize her vision of becoming one of the first twenty developed economies in the world by the year 2020 (Jonathan, 2011). For development to be achieved, the manufacturing sector of the economy has to be put in the proper perspective. The chemical and paints industry is one of the sub-sectors of the manufacturing sector of the Nigerian economy. The sub-sector has been in existence for a number of years and it has gone through various levels of development from the manual based processes to more technologically advanced production methods. Recently, the performances and the level of activity by quoted chemical and paints

companies suggest an emerging interest in the industry and the potential for growth (Lead-Capital, 2008). Therefore, the industry needs to be repositioned for enhanced performance, which will ultimately contribute to the attainment of the developmental goal of the nation.

### **1.1 Statement of Problem**

Budgetary control, in practice, has been noted to be a tool for accountability in corporate organizations (Merchant, 2007). It is also a proven management tool which helps organization management, and enhances improved performance of any economy in different ways (James, 2008). One of its primary functions is to serve as a guide in financial planning operations (Austin, 2011). Nevertheless, there is the need to ascertain whether or not budgeting or budgetary control has any significant relationship with the financial performance of corporate organizations, particularly, in the chemical and paints industry. In Nigeria as at date, there are little empirical evidence of budgetary effect on the financial performance of the manufacturing sector in general, and the chemical and paint manufacturing industry in particular. It is this problem which this study attempt to address.

### **1.2 Research Objective**

This study examines the effect of budgeting on the performance of chemical and paints manufacturing industry in Nigeria. The main objective is to determine, with empirical evidence, the relationship (if any) that exists between budgeting and financial performance of the selected firms.

### **1.3 Research Questions**

1. Is there any relationship between budgeting and financial performance of chemical and paints industry in Nigeria?
2. What is the nature of the relationship (if any) between budgeting and financial performance of chemical and paints industry in Nigeria?

#### **1.4 Hypothesis**

HO<sub>i</sub>: There is no significant relationship between budgeting and the financial performance of chemical and paints industry in Nigeria.

HI<sub>i</sub>: There is a significant relationship between budgeting and the financial performance of chemical and paints industry in Nigeria.

## **2. Literature Review**

Orebiyi and Ugochukwu (2005) viewed budget as the plan of dominant individuals in an organization expressed in monetary terms and subject to the constraints imposed by other participants and the environment indicating how the available resources may be utilized to achieve whatever the dominant individuals agreed to be the organization's priorities. Teeters and Packer (2012) also defined budget as a comprehensive financial plan, setting forth the expected route for achieving the financial and operational goals of an organizations. Furthermore, the Chartered Institute of Management Accountants (1982) cited in ACCA Study Pack (2008) described budget as a financial and/or quantitative statement prepared and approved prior to a definite period of time for the purpose of attaining given objectives. Johnson (2009) observed that budgeting in the early stage of its evolution was primarily concerned with serving the purpose

of legislative accountability. However, Jones and Bendlebury (2008) argued that the origin of budget could be traced back to Britain when the parliament attempted to exercise control over the activities of central government.

Budgeting, at both management level and operation level looks at the future and lays down what has to be achieved. Control on the other hand, checks whether the plans are being realized; and put into effect corrective measures, where deviation or short-fall is occurring (Olurankinse et al, 2004). They emphasized that without effective controls, an enterprise will be at the mercy of internal and external forces which can disrupt its efficiency. When budgeting and control systems are in use, budgets are established which set out in financial terms, the responsibility of managers in relation to the requirement of the overall policy of the company. Continuous comparison is made between the actual and budgeted results, which are intended to either secure thorough action of managers, the objectives of policy or to even provide a basis for policy revision.

Teeters and Packer (2012) opine that budget had grown beyond a financial tool. It is above all managerial tool; in essence, it is the best tool for making sure that key resources, especially financial resource are assigned to priorities and to results. It is a tool that enables the manager to know when to review and revise plans, either because results are different from expectation or due to environmental conditions, economic conditions, market

conditions or technologies change, which no longer correspond to the assumptions of the budget. It has been emphasized that budgets should be used as a tool for planning and control. Control involves the making of decisions based on relevant information which leads to plans and actions that improve the utilization of the productive assets and services available to organizations management. Effective control is said to be based on standards with which actual performance can be compared. If there are no standards, then there can be no effective measure of attainment.

Effective control is a key management task which ensures that efforts produced at all levels are commensurate with those required to ensure the long-term future effectiveness and success of the organization. After a long history, budget had developed into an indispensable management aid for directing coordinating and controlling the activities of public and private sectors (Jones & Bendlebury, 2008).

## **2.1 Reasons for Budgeting**

Although Talal (2008) observed that several reasons have been given for embarking on budgeting by corporate organizations, Sivabalan et al, (2009) identified some of the reasons for budgeting. One of such reasons is that budgeting helps in performance evaluation and control. According to them budgeting performance reflects estimates of future events and what is considered acceptable performance. Comparing actual results for the total organization with budgeted results (measured on the same volume basis) provides

meaningful information and indicates the need to analyze and investigate the variances. Budgetary control has several merits such as: Helps to recognize the existence and significance of many different activities; Helps to direct efforts in most lucrative channels, and to enhance the realization of firm's common objectives; Helps to concentrate on the use of the principle of exception (Talal, 2008). As such, time and effort of managers are utilized in areas where most helpful results are possible.

Other reasons provided by Sivabalan et al., (2009) for budgeting include: Budgets improve communication in which they are designed to provide employees with explicit information pertaining to the level of performance expected of them. Managers must understand and enthusiastically support the budget first. Through the budget, top management communicates its expectations to lower-level employees, so that all members of the firm may understand the organization's goals and coordinate their efforts to achieve them.

Similarly, budgets promote coordination through the meshing and balancing of all departments operations and functions so that an organization's goals are realized. Therefore, budgets enforce managers to examine the relationships between their own operations and those of other departments, and in the process, to identify bottlenecks or weaknesses (Talal, 2008). Some of the problems associated with budgeting include: absence of connection between compensation and financial measures, lack of dynamic structure, lack of integration, poorly trained financial professionals, among others (Ugoh & Ukpere, 2009).

## **2.2 Financial Performance**

Generally, the financial performance of corporate organizations has been measured using a combination of financial ratios analysis, benchmarking, measuring performance against budget or a mix of these methodologies (Avkiran, 2005). Most of the studies analyzing the relationship between budgeting and firm performance use accounting information when constructing performance measures (Pike, 2004).

### **3. Methodology**

The data used for this study were basically secondary in nature, obtained from the audited financial statements of the selected companies, the Nigerian Stock Exchange fact book, the internet and other documentary sources. Four (4), out of the seven (7) quoted Chemical and Paints manufacturing companies in the Nigerian Second-Tier Security Market were randomly selected for the study. The data were analyzed using the Pearson Product Moment Correlation Co-efficient (PPMC). This enables us to establish the relationship between budgeting and financial performance of the four selected chemical and paints industry. Turnover was adopted as the budget variable while earnings per share (EPS), dividends per share (DPS), net asset per share (NAS) served as performance indicators. The selected companies included: African Paints (Nig) Plc; Berger Paints Plc; CAP Plc; and DN Meyer Plc, hereafter referred as Companies A, B, C and D respectively.

It is important to state here that the budget variable is the independent variable (x) while performance indicators are the dependent variable represented by y. The Pearson Product Moment Correlation Co-efficient PPMC is represented below as:

$$R = \frac{\sqrt{n}\sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2 (n \sum y^2 - (\sum y)^2)}}$$

In this study, R is computed electronically using Microsoft Excel Package. To test for its significance we use:

$$T = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

With 0.05 level of significance, the decision criteria is that where t value calculated is less than critical t value, accept Ho, if otherwise H1 will be accepted.

#### 4. Data Analysis

The data utilized for this study consists of turnover as the budget variable, while the performance indicators for each of the companies are EPS, DPS and NAS (Net Asset per Share). We simply calculated the percentage change (% Δ) in Turnover between budget and actual figures to justify the efficiency of control and same to performance indicators. The tables containing these data are presented below for each of the companies under consideration for a clearer understanding.

**Table I:** Correlation between Budgeting and Financial Performance of Company A Using MS Excel Package.

Year	X (% Δ Turnover)	Y(% Δ performance) EPS
		<u>EPS</u>
2006	35	48
2007	29	40
2008	30	44
2009	17	36

2010	15	22
Rt, EPS = 0.899274		
		<u>DPS</u>
2006	35	68
2007	29	60
2008	30	39
2009	17	27
2010	15	20
Rt, DPS = 0.907658		
		<u>NAS</u>
2006	35	55
2007	29	43
2008	30	24
2009	17	19
2010	15	18
Rt, NAS = 0.833934		

Source: Audited financial statement for the various years

Table 1 above shows the results of the correlation between Budgeting and Financial Performance of Company A, using MS Excel Package. The value of  $R_t, \text{EPS} = 0.899274$  indicates that the correlation co-efficient between Turnover and Earnings Per Share is 89.9%. Since  $r > 0.70$ , the relationship between turnover as a budget variable and EPS as performance indicator is very strong. Furthermore, the value of  $R_t, \text{DPS} = 0.907658$  indicates that the correlation co-efficient between Turnover and Dividend Per Share is 90.8%. Since  $r > 0.70$ , the relationship between turnover as a budget variable and DPS as performance indicator is very strong. Similarly, the value of  $R_t, \text{NAS} = 0.833934$  indicates that the correlation co-efficient between Turnover and Net Assets Per Share is 83.4%. Since  $r > 0.70$ , the relationship

between turnover as a budget variable and EPS as performance indicator is very strong.

**Table 2:** Correlation between Budgeting and Financial Performance of Company B, Using MS Excel Package.

Yr	X (% Δ Turnover)	Y(% Δ performance) EPS
		<u>EPS</u>
2006	57	53
2007	44	50
2008	30	39
2009	17	30
2010	15	24
		Rt, EPS =
		0.973998
		<u>DPS</u>
2006		61
2007	57	48
2008	44	41
2009	30	23
2010	17	18
	15	
		Rt,
		DPS = 0.983868
		<u>NAS</u>
2006	57	58
2007	44	46
2008	30	30
2009	17	26
2010	15	15
		Rt,
		NAS = 0.977939

Source: Audited financial statement for the various years

Table 2 above shows the results of the correlation between Budgeting and Financial Performance of Company B, using MS Excel Package. The value of Rt, EPS = 0.973998 indicates that the correlation co-efficient between Turnover and Earnings Per Share is 97.4%. Since  $r > 0.70$ , the relationship between turnover as a budget variable and EPS as performance indicator is very strong. Furthermore, the value of

Rt, DPS = 0.983868 indicates that the correlation co-efficient between Turnover and Dividend Per Share is 98.4%. Since  $r > 0.70$ , the relationship between turnover as a budget variable and DPS as performance indicator is very strong. Similarly, the value of Rt, NAS = 0.977939 indicates that the correlation co-efficient between Turnover and Net Assets Per Share is 97.8%. Since  $r > 0.70$ , the relationship between turnover as a budget variable and EPS as performance indicator is very strong.

**Table 3:** Correlation between Budgeting and Financial Performance of Company C, Using MS Excel Package.

Yr	X (% Δ Turnover)	Y(% Δ performance) EPS
		<u>EPS</u>
2006	62	47
2007	50	31
2008	30	42
2009	27	18
2010	17	15
		Rt,
EPS = 0.745638		
		<u>DPS</u>
2006	62	38
2007	50	55
2008	30	26
2009	27	20
2010	17	18
		Rt,
DPS = 0.793936		
		<u>NAS</u>
2006	62	60
2007	50	38
2008	30	28
2009	27	37
2010	17	12
		Rt,
NAS = 0.902312		

Source: Audited financial statement for the various years

Table 3 above shows the results of the correlation between Budgeting and Financial Performance of Company C, using MS Excel Package. The value of  $R_t, EPS = 0.745638$  indicates that the correlation co-efficient between Turnover and Earnings Per Share is 74.6%. Since  $r > 0.70$ , the relationship between turnover as a budget variable and EPS as performance indicator is very strong. Furthermore, the value of  $R_t, DPS = 0.793936$  indicates that the correlation co-efficient between Turnover and Dividend Per Share is 79.4%. Since  $r > 0.70$ , the relationship between turnover as a budget variable and DPS as performance indicator is very strong. Similarly, the value of  $R_t, NAS = 0.902312$  indicates that the correlation co-efficient between Turnover and Net Assets Per Share is 90.23%. Since  $r > 0.70$ , the relationship between turnover as a budget variable and EPS as performance indicator is very strong.

**Table 4:** Correlation between Budgeting and Financial Performance of Company D, Using MS Excel Package.

Yr	X (% Δ Turnover)	Y(% Δ performance) EPS
		<u>EPS</u>
2006	45	72
2007	64	60
2008	30	44
2009	27	30
2010	12	42
$R_t, EPS = 0.681577$		
		<u>DPS</u>
2006	45	41
2007	64	60
2008	30	28
2009	27	16
2010	12	22
$R_t,$ $DPS = 0.922896$		
		<u>NAS</u>
2006	45	50
2007	64	29

2008	30	34
2009	27	22
2010	12	8
Rt, NAS = 0.594619		

Source: Audited financial statement for the various years

Table 4 above shows the results of the correlation between Budgeting and Financial Performance of Company D, using MS Excel Package. The value of  $R_t, EPS = 0.681577$  indicates that the correlation co-efficient between Turnover and Earnings Per Share is 68.2%. Since  $0.50 \leq r < 0.70$ , the relationship between turnover as a budget variable and EPS as performance indicator is Strong. Furthermore, the value of  $R_t, DPS = 0.922896$  indicates that the correlation co-efficient between Turnover and Dividend Per Share is 92.3%. Since  $r > 0.70$ , the relationship between turnover as a budget variable and DPS as performance indicator is very strong. Similarly, the value of  $R_t, NAS = 0.594619$  indicates that the correlation co-efficient between Turnover and Net Assets Per Share is 59.5%. Since  $0.50 \leq r < 0.70$ , the relationship between turnover as a budget variable and EPS as performance indicator is strong.

The hypothesis was tested using the value of the result of the correlation between Budgeting and Financial Performance of Company B, as reported in table 2. The value of  $R_t, EPS = 0.973998$

$$T_c = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

$$T_c = \frac{0.973998(\sqrt{5-2})}{\sqrt{1-(0.973998)^2}}$$

$$T_c = 10.46201448. \quad T_x = 2.353$$

Decision: Since  $T_c$  value of (10.46201448) is greater than  $T_x$  value of (2.353), we therefore reject  $H_0$  and accept  $H_1$ . It could be concluded therefore that there is a significant relationship between budgeting and

the financial performance of chemical and paints industry in Nigeria.

## **5. Conclusion**

This study is on the effect of budgeting on the financial performance of chemical and paints industry in Nigeria. Specifically, it examined the relationship between budgeting and financial performance of the selected chemical and paints companies, using Pearson Product Moment Correlation. The findings revealed, in most of the cases considered, that there is strong relationship between turnover as a budget variable and performance indicators i.e EPS (Earnings Per Share), DPS (Dividend Per Share) and NAS, (Net Asset per Share) of the selected chemical and paints companies. The hypothesis tested also confirmed that there is a significant relationship between budgeting and the financial performance of chemical and paints industry in Nigeria.

## **6. Recommendations**

Following our findings, we hereby advise managers and business operators in the manufacturing industry and other industry to pay more attention to their budgetary control systems, while those without any should endeavour to ensure the set-up of a result-oriented system as this will go a long way in repositioning businesses and organizations from their creeping performance level to an improved and high capacity utilization point.

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# Relationship between self-efficacy and Organizational Commitment

## (A conceptual framework)

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### Abstract

Self efficacy, a social cognitive construct which refines a person's belief in his/her ability to perform specific tasks, is considered to be a reliable predictor of organisational commitment. Studies have examined self efficacy and organisational commitment separately. However the relationship between these two constructs has largely remained unexplored. Objective of this study, therefore, is to examine the relationship between self efficacy and organizational commitment through an analysis of the available extant literature and empirical studies. Conclusions incline to indicate that employees having greater sense of self efficacy results in significant positive influence on organisational commitment.

**Key Words:** Psychological capital, Self efficacy, Organisational commitment,

### Introduction:-

Now days the role of human capital that refers the knowledge, capabilities and experiences of the employees are getting important in the organisational field. Under the impact of global capital flows paralleled with these developments another term as organisational psychological capital that is

discussed in terms of valuing and evaluating the human resource is becoming subject of different researchers (Wright, 2003). This new approach explores the psychological capacities and strengths of the positively oriented human resource for improving the organisational and personal psychological capital may regarded as a strength that should be retained and managed in promoting the personal development and performance at personal level and increasing the leverage, performance, income and competitive advantage at the organisational level (Luthans, et al., 2007). That is, why industrial/organisational psychology has gained wide acceptance these days because human factor is very important for the achievement of the objectives of any organisation. Organisational psychology is based on the assumption that every person is different from every other. People differ in different ways including in their physical characteristics, in knowledge, in aptitude, in interest, in temperament and in character, (Harrel, T.W, 1964). Bandura et al., (1992) stated that self efficacy is one of the most prominent of these variables and recent addition to the organisational research agenda, a person's estimate of his or her capacity to orchestrate performance on a special task. Although relatively unexplored, the construct of self efficacy has many implications for organisations, (Gist 1992).

### **Self-efficacy**

The concept of self-efficacy was first proposed by Bandura in 1977. It refers to one's perceived capabilities to execute the courses of action, with emphasis placed on performing skills rather than possessing skills, to achieve a given mission (Bandura 1986). Judge et al (1997) extended the concept to a global level, and defined it as one's estimate of capabilities to mobilize motivation, cognitive resources and course of action needed to exercise control over events in one's life. Self efficacy is

essentially an individual's future oriented judgment about his competence rather than actual level of competence (wool folk, et al., 2000).

Self efficacy effects behaviour in different ways: first, it influences choice of behaviour, second, self efficacy affects an individual's thoughts and emotional reactions, and thirdly self efficacy may help determine how much effort people will expend on an activity (Pejares, 2002). Bandura (1986) pointed out four sources of affecting self-efficacy: (I) Enactive Mastery - the most powerful and prevailing influence on self efficacy is personal attainment. Success raises self efficacy, failures lowers it. (II) Vicarious Experience (Modeling) - this originates from observing other similar people to perform a behavior successfully. This is a process of comparison between one self and someone else. (III) Verbal Persuasion - verbal or social persuasion received from others. Successful persuaders foster people's belief and on the other hand negative persuaders defeat and lower self efficacy. (IV) Psychological persuasion - if success is attributed to internal or controllable causes such as ability or effort, efficacy will be enhanced. If success is attributed to external uncontrollable factors such as chance, self efficacy may be diminished. People with high levels of self efficacy set for themselves challenging goals and maintain strong commitment to them. They sustain their efforts in the face of failure. Recovery after failure is quick, attribute failure to insufficient effort or acquirable knowledge and face threatening situations boldly. Self efficacy leads to effective problem solving followed by increase of positive emotions. A low sense of self efficacy is associated with negative emotions and helplessness. People with weak sense of self-efficacy avoid challenging tasks and believe that difficult tasks and situations are beyond their capabilities. Focus on personal failings and negative

outcomes; quickly lose confidence in personal abilities (Schwinzer, 1992).

Collins (1982) found that sense of efficacy shapes casual thinking. High self-efficacy people attribute failure in difficult task to insufficient efforts where as those with low self efficacy attributed it to deficient ability. Rokeach (1968) and Nisbet & Rose (1980) argued that human beings take their beliefs very seriously and even fuse them with their own identity. Failure in an area where one has a very high sense of efficacy may just be easily interpreted as failure of self rather than lack of effort.

Empirical studies of self efficacy have yielded several consistent findings. For example, self efficacy is associated with work- related performance: life insurance sales (Barling & Beatite,1983), faculty research productivity, coping with difficult career- related tasks (Stumpf, et al 1987), Career choices (lent, et al 1987), learning and achievement (Campel & Hacket, 1986; Wood & Locke , 1987)], and adaptability to new technology (Hill , Smith, & Mann, 1987).

Self efficacy affects the amount of energy we invest in a task and the time during which we persevere without achieving the desired results. Those who wish to achieve a mission effectively must possess a belief of self efficacy. It is because success often results from continuous trials (Hellervik et al 1992).

Empirical research reveals that self efficacy is positively related with many organization related variables, such as, organizational commitment, job satisfaction, preparedness for organizational change (Schyns, 2004: schynes and Collani, 2002).

### **Organizational Commitment**

Organizational commitment is the relative strength of an individual's identification with and involvement in a particular organization (Steers, 1977). It is a state in which an employee

identifies himself with a particular organization and its goals and wishes to maintain membership in the organization (Angel & Perry, 1987). Organizational commitment is purely psychological. It is a measure of the extent to which an employee has formed a strong psychological attachment to an organization (Dodd, 2002). Commitment has three primary components (i) strong belief in and acceptance of the organizations goals and values (ii) Willingness to exert considerable effort on behalf of the organization and (iii) A strong desire to remain with the organization (Porter, Steers, Mowday and Boutian1974). According to Allen and Meyer (1991) organizational commitment construct comprises of three interrelated dimensions: Affective Commitment that is an emotional attachment to an organization, Normative Commitment means an employee's belief that he or she is obligated to stay with the organization and Continuance Commitment that is the individual's attachment to an organization because of cost associated with leaving the organisation. Organizational commitment is considered desirable for organizations generally because of its positive effects on a number of outcomes including employee retention, attendance, performance, citizenship behaviour, and general employee's well-being. Commitment leads to continuous flow of improvements, that is, cost and efficiency improvement, reduced absenteeism and turnover (Jamieson, 1996; Watson, 2002).

Highly committed employee's show emotional attachment and loyalty to the organization and get actively involved, and are pivotal assets without which the inanimate assets are worthless Robbins, (1998). Committed employees identify goals and values of the organization and display greater organizational citizenship behaviour i.e., willingness to go over and beyond their required job duties (Porter et al., 1976; Lok & Crawford, 1999).

**Empirical studies examining the Impact of impact of self efficacy on Organizational commitment:-**

The association between self-efficacy and organizational commitment has been established by various studies in industrial organizational psychology. In a met-analytic study, Meyer et al, (2002) observed a positive correlation between self-efficacy and organizational commitment. In another research, carried out on secondary school teachers, Salami (2007) observed a positive relationship between self-efficacy and organizational commitment. Moreover, Luthans et al., (2006) stated that employees with a high level of general self-efficacy are more likely to be committed to their organizations and have a lower intention to turnover than the employees with a low level of self-efficacy. Moreover, in a study, Schyns and Collani (2002) found occupational self-efficacy to be positively and significantly related with job satisfaction and organizational commitment.

Steers (1977) believed that high levels of self efficacy and organizational commitment can advance the organizational goals, individual career, and compensation advancement. And employees with high levels of self efficacy and organizational commitment can provide organization a stable work force. Mottaz, (1988) found that the effects of individual characteristics on organizational commitment were rather indirect in comparison to the effects of attitudinal factors. And one such factor that may affect employee's organizational commitment is their level of self efficacy. Employees with their level of self efficacy would be more confident with their competence at work and more likely to exercise initiatives to add value to their organization.

Several luminaries (Gardner & Pierce, 1998; kanter, 1997) found that self efficacy was positively

related to organizational commitment. Sinha et al (2002) studied the relationship between organizational commitment and self efficacy in a sample of 167 male managers selected from Tata Engineering and Locomotive Company, Jharkhand, India. Significant relationship between Self efficacy and organizational Commitment was found. Study conducted by Rathi and Rastogi (2009) explored the relationship among emotional Intelligence, Occupational self efficacy and organizational commitment. Data were collected from 120 employees working in various organizations in India. A positive relation was found between self efficacy and organizational commitment.

Comparison was made by Busch et al., (1998) in different disciplines to draw a relationship between job satisfaction, self- efficacy, goal commitment, and organizational commitment. The subjects were faculty employees of four educational programs in the public colleges in Norway which were restricted to faculties of nursing, teachers, engineering and business administration and data were collected from 10 colleges. In this study results showed a positive relationship between self-efficacy and organizational commitment. Another comparative study of Govt. and Private Sector employees was carried by Nita and Esha (2010) to compare the level of organizational commitment and self efficacy between male and female executives. The Sample was collected from 100 Govt. and Private sector executives equally divided into males (n=50) and female (n=50). Govt. sector executives were selected randomly from Allahabad Bank, SBI Bank, PNB Bank and R.A.V school while private sector Executives was selected randomly from ICICI bank, HDFC Bank and Holy Faith School. Results revealed that as compared to male executives female executives have perceived more organizational commitment and Self efficacy. In line with the comparison studies, another study of executive and

non-executive associates of Delhi Metro Rail Corporation was conducted by Singh and Sangeeta (2007) to study and compare the level of organizational commitment and self efficacy among the associates and also to understand the relationship between these two variables. Data was collected from 50 executive and non executive of DMRC. The results revealed that level of commitment and self efficacy of executives was higher than those of non-executives, and there was positive relationship between self-efficacy and level of organizational commitment.

In (2008) Sheriyal and Suliaman conducted a study to see the impact of self efficacy on organisational commitment and Trust in 3 to 5 star hotels in klang Valley in Malaysia. Results revealed that relationship between self efficacy and organisational commitment was quite weak. Agarwal (2009) conducted another study to see the impact of self-efficacy on employee's commitment in the academic and corporate organisations. The sample consists of 63 employees from each organisation. The results showed that self efficacy and commitment was high in case of academic sector because they felt that their job was not only central to the organisation but it also gave them a sense of utilisation of their skills and provide them power to utilise skills.

Influence of positive characteristics on job characteristics was studied by Vohra and Goal (2009). Sample consists of 146 middle level managers in western India. Results showed significant positive relationship of self efficacy with affective commitment, normative commitment and normative commitment. To explore the influence of psychological capital on organisational commitment in public and private sector organisations by Shahnawaz and Jafri in (2009). The sample consists of 160 junior level managers. The results showed that all the dimensions were significantly different in two

organisations and self efficacy in public sector was more than in private sectors and self efficacy predicts the organisational commitment.

Ni et, al., (2010) conducted a study on mediating role of self efficacy and organisational commitment towards budgeting decisions and performance. Sample consists of 164 employees from Taiwan Stock Exchange. And the indirect effects of self efficacy between budgetary participation and managerial outcome criteria are not significant, while the attitudinal effects of budgetary participation which are through organisational commitment. In addition, the relationship between self efficacy and organisational commitment was positively associated. Bo Yu (2011) also studied mediating role between self efficacy, leadership and commitment. Sample consists of 309 employees in China, and results revealed that self efficacy was positively related with organisational commitment.

The effect of the psychological capital on the attitudes of commitment was investigated by Fatieh (2011) on 213 employees in Ankara. Self efficacy was found a significant predictor of the organisational commitment.

Ming et al., (2011) conducted a study intended to address the individuality, sustainability and organizational commitment of banking employees under work pressure to explore the relationship between the working environment, self efficacy and organizational commitment. 251 employees from the banking industry in Taiwan were chosen as the subjects of the study through purposive sampling. The study found that a supervisor's emotional intelligence has a significant positive influence on his personal leadership style, to elevate the employees self- efficacy, and that employees self efficacy results in a positive significant influence on organizational commitment.

### **Conclusion and implications:**

The aim of this paper is to explore the effects of self efficacy on the organisational commitment. The results are in the direction that self efficacy is positively related to organisational commitment. The paper also suggests the mediating role of self efficacy in enhancing organisational commitment and results also found self efficacy as a predictor of organisational commitment.

Employees with greater sense of self efficacy tend to have higher level of organizational commitment and therefore understanding of how self efficacy of employees effects their organizational commitment is more important for more effective management and control. Future research again needs to be focused on the relationship between self efficacy and organisational commitment. Employees that have different levels of organisational commitment and self efficacy may require different managerial styles and motivational strategies for optimum organisational effectiveness, Morris & Sherman (1981).

More ever, we suggest that in face of serious challenges in a competitive environment, an organisation endeavour to improve its managing supervisor through comprehensive recruitment and training mechanism in order to raise employees self efficacy at the workplace, resulting in high organisational commitment among employees and desirable organisation performance. However, few research studies have been found on the relationship between self efficacy and organisational commitment in the past literature of human resource, the findings of this paper on the basis of examination and review has presented a wide variety of studies with positive results and findings.

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# Sustainability orientation: Driver of firms' innovativeness and business performance

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## Abstract

The link between sustainability and business performance has been one of the widely researched areas for the last few decades. A plethora of research shows that sustainability is an action oriented phenomenon that contributes to environmental and social status of businesses. Previous studies largely focused on identifying drivers that enhance the firm capacity to innovate new products/services. However, less attention has been paid to sustainability orientation as a direct driver of firm's innovativeness leading towards long term business performance. Extant literature on firm's innovativeness suggests integration of three main dimensions into business performance: market orientation, entrepreneurial innovation and learning orientation. This paper sheds light on sustainability orientation and underpins an integrative conceptual framework linking sustainability orientation as one of the key construct of firm's innovativeness. This research also suggests that further empirical research is required in identifying the drivers of sustainable innovative performance of firms.

**Keywords:** Sustainability, Innovation, Market orientation, Triple-bottom line

## Introduction:

The emergence of sustainability as a concept in business generated considerable interests amongst practitioners, researchers and policy makers after the publication of Brundtland Commission's report 'Our Common Future'(Brundtland 1987). The changing needs of stakeholders, technological development and economic pressures contribute to the need for organizations to change significantly the ways in which they think and act (Brown & Eisenhardt 1998). Orientation towards sustainability has grown from being a movement focused on environmental concerns, to a widely accepted framework that the decision making of individuals, business firms, society and governments to balance the concerns of ecological, economic, and social needs of the current and future generations. The essence of this form of development is a stable relationship between business activities and the natural world, which does not diminish the prospects for future generations to enjoy a quality life (Mintzer 1992). Under this setting the quest for sustainability has started to transform the competitive landscape (Nidumolu *et al.* 2009), which eventually leads companies to change the way they manage products, services, technologies and business models.

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Despite the growing interest towards sustainability, research on sustainability orientation as a driver of firm's innovativeness has been anecdotal. Majority of the research encompasses on the relationships between learning

orientation (Sinkula 1994; Slater & Narver 1995b), market orientation (Jaworski & Kohli 1993; Narver, J.C. & Slater, S. F. 1990) and entrepreneurial orientation (Hult, G *et al.* 2004; Lumpkin & Dess 1996a). Moreover, concentration has been given to the resource based view which aims to clarify how a firm's resource drives its performance (Collis & Montgomery 1995). Against this backdrop this research reviews the existing drivers of innovativeness and develops an appropriate conceptual framework that incorporates sustainability orientation as a predictor of firm's innovativeness.

### **Prior Research Concerning Drivers of Innovativeness:**

Extant research identified the possible drivers of innovation. Zaltman *et al.* (1973) proposed that innovativeness is a process which goes through several stages of which 'initiation' is an important one and openness to innovation is an integral part of an initiation process. Openness refers to the extent to which an organization is willing to adopt or resist an innovation. In a similar vein Van de Ven (1986) refers to the issue as the management of the organization's cultural attention to recognize the need for new ideas and action within the organization. These studies conceptualizes that when specific orientations are rooted in organizational culture, the intensity and consistency of resultant behavior are augmented across groups, persons (employees) and situations within the firm. Despite the number of studies undertaken to analyze the drivers and outcomes of innovativeness, encompassing all the relevant constructs in an integrated manner remains limited. In view of the above, this paper considers all these three dimensions- market orientation, learning orientation and entrepreneurial orientation as fundamental to build up the firm's innovative capacity.

### **Market Orientation and Innovativeness:**

Market orientation (MO) is significantly important in enabling firms to understand the market place and develop appropriate product/service strategies to meet customer needs and requirements (Liu *et al.* 2002). MO assures a customer focused strategy for market knowledge base generation, followed by coordinated, inter-functional marketing efforts to achieve long term success of firms. There have been significant advances in the development of a market orientation construct since the late 1980s and much analytical effort has been devoted to conceptualizing the constructs of market orientation. Two conceptualizations of market orientation have gained wide support (Piercy *et al.* 2002) the information-based view of market orientation developed by and the culture-based interpretation of market orientation tested by (Narver, J.C. & Slater, S.F. 1990). (Kohli & Jaworski 1990) define market orientation as a set of ongoing behaviors and activities related to generation, dissemination, and responsiveness to market intelligence. MO has been characterized as a culture of the organization that aims to put customer satisfaction at the center of business operations and therefore produces superior value for customers and outstanding performance for the firm (Day 1994; Liu, Luo & Shi 2002; Narver, J.C. & Slater, S.F. 1990). Responsiveness to changing market needs often calls for the introduction of new products and services together with innovation capacity for a firm. Market orientation has also been described as the implementation of marketing activities designed to satisfy customer needs better than competitors are able to satisfy customer needs (Martin & Grbac 2003). Under this conceptual variance (Celuch 2002). MO can be summarized in the following dimensions: 1) Customer focus, 2) competitor focus 3) inter-functional coordination. Noticeably all the conceptualizations of MO have an operational focus on information gathering, information dissemination and the ability to behaviorally respond to what is received (Baker & Sinkula 1999).

### **Learning Orientation and Innovativeness:**

Learning orientation (LO) is one of the constructs of firm's innovativeness which has been alternatively used with 'Organizational learning' (Paladino 2007), 'commitment to learning' (Sinkula *et al.* 1997). LO in organizational context prescribes the development of knowledge in the organization (Cohen & Sproull 1996; Crossan *et al.* 1999). As the business expands it becomes quite essential for firms to correspond to rising priorities and build up knowledge and expertise of both tangible and intangible assets. This orientation towards new process and learning also plays a crucial role in updating its assets and capabilities concerning its key activities (Wang 2008). LO provides firm with competitive edge, as lack of it poses a credible threat from the competitors. Organizations that engage in learning not only recognize and exploit opportunities but in time, are also capable of creating new opportunities. Further, Belohlav & James (1996) suggests three crucial areas such as value that needs to be provided to customers through goods and services; (2) continuous renewal of company operations and processes; and (3) distinct resources.

### **Entrepreneurial Orientation and Innovativeness:**

Entrepreneurial orientation has been conceptualized by a number of scholars. Lumpkin & Dess (1996b) conceptualizes EO as a firm's strategic orientation, capturing specific entrepreneurial aspects of decision-making styles, methods, and practices. (Slater & Narver 1995a) conceptualizes EO as the processes, practices, and decision making activities that lead to new entry. Therefore, exploring EO is of great importance for a firm as it allows creating explorative knowledge associated with innovation and superior performance (McGrath 2001). It also manifests a proclivity toward creation of new products and ventures and a pro-activeness and competitive aggressiveness that embody entails a bold action-oriented positioning (Cooper, A *et al.* 1989; Cooper, AC & Dunkelberg 1986). Based on these conceptualizations of several studies it can be inferred that EO is a combination of the three dimensions: 1) explorative knowledge 2) proactive thinking 3) risk taking.

Regarding the individual dimensions of EO, research suggests that each of them have a universal positive influence on performance (Wiklund & Shepherd 2005). Innovative companies, creating and introducing new products and technologies, can generate extraordinary economic performance and have even been seen as the engines of economic growth (Schumpeter 1934). Proactive companies can create first-mover advantage, target premium market segments, charge high prices, and "skim" the market ahead of competitors (Zahra & Covin 1995). They can control the market by dominating distribution channels and establishing brand recognition. The link between risk taking and performance is less obvious (Wiklund & Shepherd 2005). However, there is research to suggest that while tried-and-true strategies may lead to high mean performance, risky strategies lead to performance variation as some projects may fail while others may succeed in terms of becoming more profitable in the long term (McGrath 2001).

Source	Framing	Focus/Findings
Paladion (2007), Homburg and Pflesser (2000), Jaworski and Kohli (1993), Kohli and Jaworski (1990), and Narver and Slater (1990)	Market orientation-innovativeness	Market orientation is positively linked with innovative business performance.
Rhee et. al. (2010), Alegre and Chiva (2008), Paladion (2007), Argyris and Schon (1978), Crossan et al. (1999), Farrell (2000), Huber (1991), Slater and Narver (1995), and Wang (2008).	Learning orientation-Innovativeness	Learning orientation is positively linked with innovative business performance.
Wang (2008), Madsen (2007), Lofsten and Lindelof (2005), McGrath (2001), Wiklund and Shephard (2005), Lumpkin and Dess (1996), , Miller (1983), Zahra and Covin (1995), Cooper et al. (1989), Daft and Weick (1984),	Entrepreneurial orientation-Innovativeness	Entrepreneurial orientation is positively linked with innovative business performance.
Porter (1995), Nidumolu et. al (2009), Edvardsson & Enquist, 2009	Sustainability - Innovativeness	Sustainability drives firms towards being innovative. Therefore sustainability orientation is positively linked with innovative business performance.

**Table-1:** Literatures on the drivers of firms' innovativeness

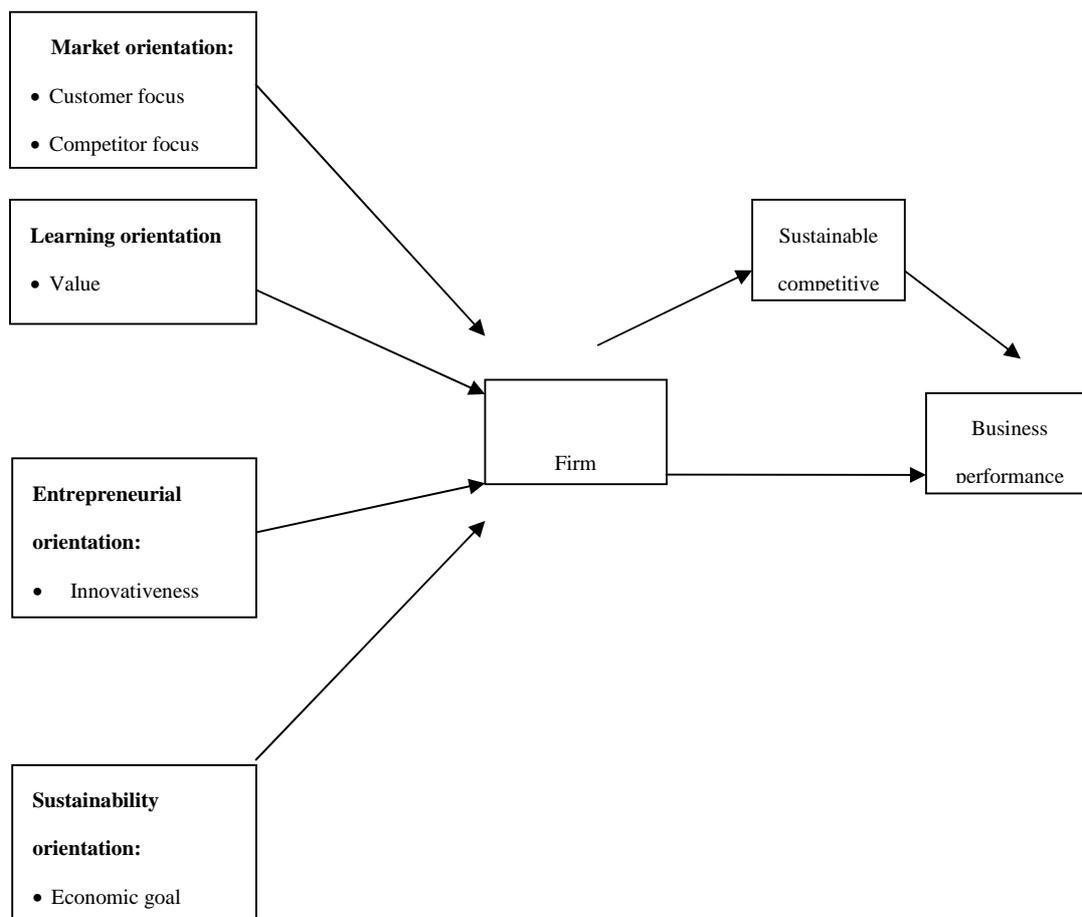
#### **Link Between Innovativeness and Sustainability:**

Innovation is a catalyst of growth in business and economy. (Luecke & Katz 2003p.2) refers to innovation as 'the introduction of a new thing or method. Innovativeness refers to 'a firm's capacity to engage in new enterprise that is, introduction of new processes, products, or ideas in the organization' (Hult, GTM *et al.* 2004p. 429). This capacity to innovate is among the most important factors influencing performance (Porter 1990) and as such, innovativeness is amongst the unique culture which embeds in the tangible and intangible resources leading a firm towards successful business performance. Traditional belief of innovation was more focused on Schumpeterian view of 'creative

destruction' (Schumpeter 1934) which mainly focus innovation as the critical dimension of economic change. Accordingly there has been extensive research on innovation as the dominant tool for enhancing product and service performance of the firm. The radical paradigm shift in business literature undermines the economic goal orientation as the central focus and prioritizes the value orientation which elucidates a combination of core company values and foundational values that guide a firm in creating customer value and a sustainable service business (Edvardsson & Enquist 2009). It also corresponds to economic, social and environmental goals. The link between innovation and sustainability is well documented in the conceptualization of (Hauschildt 2004) where the author explicitly identifies three categories to measure innovation success 1) environmental and social effects, 2) technical effects and 3) economic effects. Sustainability enumerates a holistic view that includes a multitude of human activities related to economic, environmental, and social concerns (United Nations 2002). It is also a way to view corporations for what they are, what they do and how they relate to social environmental and political concerns in a manner that was previously impossible (Demirag *et al.* 2005 p.356 ). So it appears that the link between sustainability and innovation is an overarching array of human and technological efforts that brings about long term objectives of firms.

### **The Conceptual Model:**

This research reveals that market orientation, learning orientation and entrepreneurial orientation exert a positive effect on innovativeness and each of the dimensions concedes special importance to build up the innovation culture or innovativeness of the firm. While all of the above thoughts are very crucial to firm's a competitive advantage there is another emerging stream of research which adds a new dimension for businesses which is popularly known as a 'triple bottom line' approach. A triple bottom line approach posits that in order to achieve sustainable development firm's need to address three dimension of the development: economic (profit), social (people) and environmental (planet) (Elkington 1998). Jamali (2006) suggests that an organization can improve its movement toward sustainable development with a management approach that integrates the triple bottom line and develops learning organization characteristics. Markley and Davis (2007) provide evidence to support the notion that organizations can improve their competitive advantage by focusing on the triple bottom line. We find the strongest arguments for our research as posited by (Porter & Linde 1995). Porter & Linde (1995) elucidates that properly designed environmental standards can trigger innovations that lower the total cost and improve value which leads towards attaining competitive advantage. He further exemplifies the concept of how the Dutch flower industry being pressurized by environmental contamination issues forced to become innovative and eventually came up with a ground breaking, revolutionary innovative way to grow flowers on the water. There are numerous other examples showing that orientation towards sustainability ultimately lowers the cost and increase the revenues. For that reason sustainability orientation expands the innovative capacity of the firm which ultimately leads towards a long term and sustainable competitive advantage. Based on the relevant literature, conceptual exploration of the drivers of innovation and grounded by the 'triple bottom line' approach we have developed a conceptual framework. We further put forward some propositions to support this framework.



**Figure 1- Conceptual framework**

Based on the above conceptual model we propose the following propositions:

- P1:** There is a positive relationship between Market orientation factors and innovativeness
- P2:** There is a positive correlation between Learning orientation factors and business performance.
- P3:** There is a positive correlation between entrepreneurial orientation factors and business performance.
- P4:** There is a positive co-relation between sustainability orientation factors and business performance.
- P5:** Sustainability orientation factors lead innovativeness of firms.
- P6:** Innovativeness influencing business performance through sustainable competitive advantage.

**Conclusion, Limitations and Future Research**

This paper makes contribution to an understanding of the contracts driving innovation leading to firms’ financial performance. The proposed model can be considered novel in that, the model integrates competitive advantage as a variable mediating the relationship between innovativeness and business performance. This proposed mediating issue has not been tested as such in the prior research. The theoretical model integrated the emerging constructs of

market orientation, learning orientation and entrepreneurial orientations in a new research setting which could be tested with empirical data. Sustainability as a growing concept has been applied as a means to achieve triple bottom line of firms. Research shows that sustainability is a driver of organizational and technological innovations yield both bottom-line and top-line returns (Nidumolu, Prahalad & Rangaswami 2009). Because of the conceptual prominence of sustainability in business, this research further suggests that in-depth research is required in analyzing the driver of sustainability on innovativeness of firms. This paper has also some obvious limitations. Firstly, lack of space has constrained the scope of full exploration of the relevant issues relating to specification, measurement and testing of the theoretical model. Secondly, it integrates some of the theoretical issues surrounding firm sustainability and innovativeness rather than presenting a holistic view in relation to business performance.

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# **EFFECTS OF HUMAN RESOURCE PROVISION ON ORGANIZATIONAL PERFORMANCE IN TEXTILE INDUSTRY OF AN UNDERDEVELOPED PARSIMONY**

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## **ABSTRACT**

A large and growing body of literature has investigated human resource planning in context of organizational performance for past several decades. This study investigated the effects of human resource planning on organizational performance in textile industry of a developing economy for compensating the research gap. The research strategy was quantitative with a research design of mainly correlation. Regression analysis was used to test the hypothesis. Empirical evidence showed the impact of human resource planning on organizational performance in textile industry of a developing economy. Future research can be conducted to investigate specific environmental factors of a particular industry in a developing economy; moreover, it can be investigated in connection with human resource planning contextualizing

organizational performance.

**Keywords:** Human resource planning; organizational performance; textile; developing economy

## **INTRODUCTION**

In the past two decades a number of researchers have investigated human resource planning (Bandt & Haines, 2004; Nkomo, 1987; Simms, 2005). What we know about human resource planning (HRP) is largely based upon empirical studies that investigated HRP in context of developed economies (Gatewood, Feild, & Barrick, 2010). This study considers HRP as strategic human resource planning that is a process to determine the future need human resources for an organization. HRP is exercised to integrate employee management with strategic orientation of an organization such as: vision; mission; goals and objectives; short and long term strategic plans; as well as financial planning (Schuler & Jackson, 2007). For the most part of HRP is to conserve equitable number of employees with right expertise, experience, competences in right job, at right time, and at right cost (DeCenzo & Robbins, 2009). This study considers HRP for the organization to such questions: what business the organization will be in? How goals and objectives will be attained? What jobs are needed to be done and by whom? What kind of matching skills, knowledge and abilities are required for the jobs? This study basically corresponded to such questions in pursuit for the effects of HRP on organizational performance in a developing economy.

Organizations can make use of HRP as a strategic tool in different situations like: number

of employees to be employed at new locations; retaining highly skilled staff; managing an effective downsizing program; and succession planning. The objectives behind HRP are to anticipate organizational future human resource needs and to identify practices that will assist organization to meet future needs (Paauwe & Boselie, 2003). Organization can extract numerous benefits from this HRP: planning the job assignment; cope up with fluctuations in staffing; identification of recruiting needs; and provide further constructive information.

Most of the organizations want HRP systems for the reasons: to be receptive to transform; supposition can be customized without difficulty; to distinguish organizational variability about talents; to permit agility in supply to be included; to be uncomplicated to recognize and exercise; to be less time demanding (Lenz, 1981). During the past thirty years much more information has become available on HRP in context of integration of strategic objectives to human resource programs and policies. A great and growing body of literature has investigated the use of proper, wide-ranging HRP existence in firms of developed economies; however, there is a dearth of research about HRP's effects on organizational performance in a developing economy. The purpose of this study is to investigate the impact of human resource planning on organizational performance particularly for textile industry of a developing country. The next section of this article presents a review of HRP literature in connection with organizational performance.

## **LITERATURE REVIEW**

Several previous studies in strategic management literature have reported the formal

utilization of HRP along with numerous benefits for the firms of developed economies (Ansoff, Avner, Brandenburg, Portner, & Radosevich, 1970; Ferris et al., 1998; Fulmer & Rue, 1973; Nkomo, 1987). However, much of the research was carried out for integration of human resource management with the performance of organization (Hailey, Farndale, & Truss, 2005). Moreover, debate was encompassing the best practices paradigm to explore high-commitment and high-performance practices for modern organizations to stay competitive (Huselid, 1995).

Some studies investigated the alignment of human resource management strategies with organizational strategies to contextualize organizational performance (Gratton & Truss, 2003; Wright & Snell, 1998). However, there is lack of consensus about the operational conception of integration for HRP and organizational performance (Marchington & Grugulis, 2000). Additionally, the measurement of organizational performance is another debatable issue in pertinent literature of strategic management. Mostly shareholder perspective is adapted to measure organizational performance. That is to focus on productivity and financial performance indicators (Cascio & Boudreau, 2010; Huselid, 1995).

Review of theoretical HRP suggests that HRP should be confluent to human resource strategy; it should be aligned to the firm's corporate as well as business strategies (Miles & Snow, 1984). HRP is future oriented and with two pronged approach. Firstly, what type of human resource is required in future to manage and operate the firm? Secondly, what type of policies and programs are required to meet organizational objectives in context of HRP?

Walker (1980) documented three approaches with which a firm might be influenced to

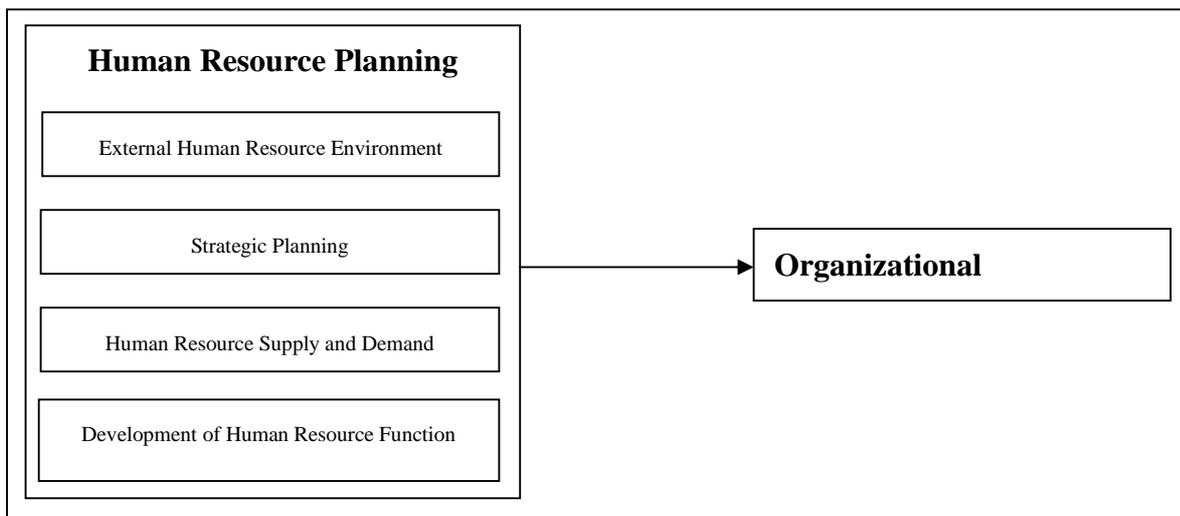
achieve its strategic objectives: “cost economics; capacity to operate effectively; and capacity to undertake new enterprises and change operations”. He documented that organizational performance was affected by these factors. The main aim of this investigation is to assess the impact of HRP on organizational performance in textile industry of a developing country. The key research question of this study was thus whether or not HRP has an impact on organizational performance in textile industry. Most studies have focused on HRP for several industries which are operating in developed economies. However, few researchers have been able to draw on any structured research into a particular industry such as textile. So far, however, there has been little discussion about HRP and organizational performance in textile industry of a developing economy. Therefore, hypothesis is postulated in consideration with the pertinent literature to compensate empirical and theoretical research gap for the textile industry of a developing economy; therefore, to measure the effect of HRP on organizational performance the following hypothesis is postulated. Theoretical research framework of this study is presented in Figure 1.

**H<sub>1</sub>:** There is no impact of HRP on organizational performance in general environment of a developing economy.

## **METHODOLOGY**

To date various methods have been developed and introduced to measure the impact

HRP on organizational performance. The study design was mainly quantitative and correlational with hypothesis testing. The extent of researcher interference with this study was minimal. It was field study that was conducted in non-contrived environment and the unit of analysis was organization. Type of investigation was mainly designed to investigate the correlation between human resource planning and organization performance in textile industry of a developing economy. Self-administered questionnaire was employed to collect the data. Research instrument was designed from consideration of a previous study pertinent to HRP and organizational performance (Nkomo, 1987) and time horizon was cross-sectional. Convenience sampling was exploited for this study. The sample consisted of large manufacturing textile firms which were listed in Stock Exchange of Pakistan; moreover, these organizations were employing human resources practices as well as human resource programs linked to organizational performance. Questionnaires were mailed to the organizations' top management; however, some questionnaires were filled via telephonic conversation. The 21 replies represented a response rate of 28 percent. Organizations involved in HRP participated more than those who were not indulged in HRP.



**Figure 1** Theoretical research framework

Quantitative techniques were used for data analysis. Regression analysis was employed to for hypothesis testing (Sekaran & Bougie, 2009). Respondents were asked to evaluate human resource planning on four variables: external human resource environment; linkage of HRP to strategic planning; human resource supply and demand; development of human resource functions. To measure organizational performance formative measures were employed for a period of two years as averages of sales growth; earnings growth; earning sales ratio; and earning on total assets. Financial data of the organizations were collected from annual reports.

## **DATA ANALYSIS AND RESULTS**

This study produced results which corroborate the finding of a great deal of the previous work in the field of human resource management and strategic management. There were

positive and negative correlation among factors of HRP and organizational performance; as it is shown in correlation analysis of variables (see Table 1). External human resource environment had a positive relation (0.17) with organizational performance.

Those organizations which were linking their HRP with strategic planning had positive relation (0.13) with organizational performance. Human resource supply and demand had negative relation (- 0.20) with organizational performance. However, development of human resource functions had negative relation (- 0.29) with organizational performance.

These findings further support the idea of linkage between HRP and organizational performance; the model summary proved that multiple correlation coefficient (R), using all predictors simultaneously was 0.56 ( $R^2 = 0.31$ ).

**Table 1:** Correlation analysis of HRP and organizational performance

	External human resource environment	Strategic planning	Human resource supply and demand	Development of human resource function
External human resource environment				
Strategic planning	.00			
Human resource supply and demand	-.11	.80		
Development of human resource function	.011	.58	.80	
Organizational performance	.17	.13	-.20	-.29

Moreover, adjusted  $R^2 = 0.14$  and it showed that 14 per cent of the variance in organizational

performance was predicted from external human resource environment; linking HRP with strategic planning; human resource supply and demand; and development of human resource function.

**Table 2:** Model summary of theoretical research framework

R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Change statistics		
			R <sup>2</sup> change	F change	Sig. F Change
0.56	0.31	0.14	0.31	1.82	0.17

These results are consistent with those of other studies and suggest that impact of linking human resource planning with strategic planning upon organizational performance was high as comparative to other factors of HRP (see Table 3).

**Table 3:** Coefficients of HRP factors

	None-standardized		Standardized	<i>t</i>
	coefficients		coefficients	
	$\beta$	Std. Error	$\beta$	
(Constant)	-47.70	226.70		-.21
External human resource environment	21.09	41.24	.11	.51
Strategic planning	56.76	26.87	.75	2.11
Human resource supply and demand	-50.25	42.53	-.58	-1.18
Development of human resource functions	-12.63	17.62	-.25	-.71

The present findings seem to be consistent with other researches which found that combination of all HRP predictors did not significantly predicted the organizational performance. As it shown in Table 4 that  $F = 1.82$ .

**Table 4:** Analysis of variance

	<b>Sum of squares</b>	<b>df</b>	<b>Mean square</b>	<b>F</b>	<b>Sig.</b>
Regression	52594.37	4	13148.59	1.82	.173(a)
Residual	115292.33	16	7205.77		
Total	167886.70	20			

From the results it is concluded that there was fifty-six percent impact of HRP upon organizational performance so  $H_1$  cannot be accepted. Moreover, organizational performance was affected due to other factors and their contribution was forty-four percent.

## CONCLUSION

This paper has investigated the impact of HRP on organizational performance of textile industry of developing economy. It was designed to determine the impact of HRP on organizational performance. Regression analysis revealed the effect HRP on organizational performance in textile industry of a developing economy. The finding is in line with the previous studies which stated that HRP had a positive impact on organizational performance because it was empirically examined. This study proved the impact of HRP on organizational performance of firms which were operating in textile industry of the developing economy. These findings cannot be extrapolated to other organizations and industries of developing countries because of the limitation of small convenience sample size. This study has found that HRP is just one contributory factor for organizational performance. There are some other factors which need to be investigated in context of a developing economy; therefore, future research agenda can be to investigate specific environmental factors of a particular industry which have impact upon

organizational performance in context of a developing economy.

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# **The Determinant Factors in Presenting a Model of Accounts Receivables Risk Management: Iranian case**

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## **Abstract**

*The aim of this paper is to present a model of accounts receivables risk management in Iran's business environment. For achieving this goal, we used financial data of 77 companies listed on Tehran Stock Exchange (TSE) during 2007 till 2011. For testing and analyzing of research variables was used logistic regression model. The proposed model is based on price discrimination, debt ratio, firm growth and current ratio. Unlike the results of prior researches such as Biswal, Samantaray and Sahoo' research, a new model was created of collecting risk management found in Iran that It's different with model of prior researches and doesn't have applicable in all business environment.*

**Keywords:** Accounts Receivable, Risk Management, Price Discrimination, Debt Ratio

## **1-Introduction**

The basic financial aim of an enterprise is maximization of its value. At the same time, both theoretical and practical meaning is researched for determinants that increase the enterprise value. Financial literature contains information about numerous factors that influence the enterprise value. Among those contributing factors is the extent of the net working capital and the elements shaping it, such as the level of cash tied up in accounts receivable, inventories, the early settlement of accounts payable, and operational cash balance. The greater part of the classic financial models and proposals relating to the optimum current assets management was constructed with net profit maximization in mind. This is the

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reason why these models need reconstruction in order to make them suitable to firms that want to maximize their value. The decision to extend the trade credit terms is a compromise between limiting the risk of allowing for the payment postponement from unreliable purchasers and gaining new customers by the way of a more liberal enterprise trade credit policy. This decision shapes the level and quality of accounts receivable (Michalski,2008).

However, the main reason why companies offer trade credit is that it helps to increase sales revenues. Therefore, the trade credit should be associated with a form of investment. As with all investments, there is a risk involved. In particular, the credit risk exists as the company offering trade credit is exposed to the possibility that the debt will not be paid on time or at all.

In order to reduce the risk involved in trade credit offering, a company should apply a credit management process. The credit management process should begin with defining the credit goal and then defining the company's credit policy. The credit management process is then constituted by the decisions to grant the credit, applying risk reduction methods and credit screening, monitoring the level of receivables, collecting cash, and reporting the whole process. The credit policy management usually aims at setting the optimal credit policy and thus the optimal level of accounts receivable (Biswal and et al,2012).

Indeed, effective management of accounts receivable presents important opportunities for agencies to achieve strategic advantage through improvements in customer service, cash management and reductions in costs. An effective accounts receivable function can assist in achieving the desired cash flow outcome through the timely collection of outstanding debts.

All agencies also have an objective of continually improving customer service. A large number of agencies which operate as business are required to perform public services under a full or partial cost recovery arrangement. Effective accounts receivable management can assist agencies improve customer service through providing timely information on customer requirements and by making dealing with the agency as easy as possible. All government agencies, including those operating in a monopoly, are required to demonstrate contestability - that is delivery of a high quality standard of service at a cost that is comparable to providers of similar services operating in similar environments. Improvements in accounts receivable management which reduce the cost of collecting monies can improve an agency's

ability to demonstrate contestability and accountability. Thus, accounts receivable risk management is an indispensable tool for every company (Micheel,1997).

The accounts receivable collection risk cannot be fully avoided, and cannot be reduced by the full amount. Nevertheless, it can be reduced to an acceptable, tolerable and reasonable measure that does not jeopardize the business success and long-term business goals. Accounts receivable risk management includes research, analysis and detection of possible risks of receivables collection failures prior to the execution of the sales contract and insurance measures against these risks. Regarding this argument, the aim of this research is to present a model of account receivables risk management. For testing the research variables, financial statements' data of 77 companies have been used and for analyzing of research variables was used logistic regression model. Specifically, this article builds upon the Biswal, Samantaray and Sahoo' research by using the same instrument but the difference of this research with prior research is in using independent variables such as price discrimination, firm growth and firm size. These variables haven't been investigated in prier research.This paper is organized as follows. The next section presents economic environment in Iran. The third describes design of study. The forth section presents the prior research for the paper, while the fifth section describes research variables. The sixth section describes the research methodology and the seventh section presents a model of receivable accounts risk management. Last Section states the conclusions of the study.

## **2. Economic Environment in Iran**

Tehran stock exchange (TSE) was founded in 1967. In the first year, only six companies were in the TSE list. In 1989 along with the revitalization of the private sector and privatization of the state-owned enterprises, a new economic program began to develop the promotion of private sector activities. This coincided with the time that the first five-year national development plan in the country was at the initial stage of designing. In fact, the TSE has grown as one of the most important executive mechanism for promoting the national economy. This aimed at the environment facilitating contribution of the private sector in productive programs actively, transferring some state duties to the private sector and mobilizing private savings into investment programs. Since then the stock exchange market has grown continuously

till today. In recent years, the TSE has evolved into an exciting and growing marketplace for many investors. Now there are more than 330 companies in the TSE investors' trade-in securities hall. The new Capital Market Law was passed in November 2005, forty years since the establishment of the TSE. Under the new law, the TSE would be restructured and incorporated in the private investment. The supervision and operation of the security market is to be separated. Under the new Act, the Securities & Exchange Council is expected at the highest authority level and the responsible for all exchange relevant policies, strategies, and supervision of the market. The Minister of Economy & Finance is appointed at the position of the Chairman of the Council. The authorities in the market have been placed in the Securities and Exchange Organization, governed by the Board of Directors, with general responsibilities for administration and supervision. The Board of Directors is appointed by the Securities and Exchange Council. In the new organization, the stock Exchange, OTC markets and commodity exchange operate as self-regulatory institutions.

The TSE has been opened to non-Iranian equity owners, with the exception of oil and gas companies that in Iran the government has a monopoly control on national companies. No tax is levied on capital gains. There is a 22.5% tax levied on earnings at the source. This means that the shareholders are exempted from dividend tax which is calculated and paid by the companies in advance. The new by-law for Foreign Portfolio Investment (FPI) was approved by the government in June 2005. Under this by-law, for the first time in Iran, foreign investors can participate in the TSE. The interest that is earned from the market exchange is exempted from taxes for both the Iranian and foreigner investors. Such incentive policies have contributed significantly to the TSE's competitive edge at the regional level.

### **3. Design of Study**

The proposed model of accounts receivable risk management is based on Price Discrimination, Debt ratio, current ratio and firm growth. The proposed model should be optimal in the assurance against accounts receivable payments risks in Iran because it is based on domestic financial statements data and insurance instruments such as collateral (secured lending also known as asset-based lending), promissory note (Bank note) exist in this country.

The fundamental hypothesis is that the existing system of revenue collection risk management in Iran is

not appropriate for the transition period. A new one should be introduced, which will create the preconditions for the recovery of the economy and its development on the principles of market economy. With the goal of statistical testing, the working hypothesis was transformed into the corresponding statistical hypotheses.

The first statistical hypothesis relates to the selection of adequate economic indicators, and inquires whether there is such a set of economic indicators which could ensure maximum informational efficiency with respect to Iran's payment system. The second statistical inquiry relates to the design of optimal receivables collection risk management model, which along with the selected indicators takes into account other factors, such as the amount of debt and the strength of the instruments of insurance.

#### **4. LITERATURE REVIEW**

Biswal, Samantaray and Sahoo (2012), investigated accounts receivables risk management in Indian Pharmaceutical Industry. A sample of thirty two pharmaceutical companies are selected for this study on the basis of high sales turnover and data for this study were collected for a period from 2001 to 2011 to analyze whether the sample companies really managed their receivables or not. The paper aims at presenting the importance of accounts receivable in the credit policy management and developing a suitable model for managing receivable risk in Indian context.

Alikhan, Tragar and Bhutto (2012), examined the determinants of Pakistani listed companies' accounts receivable and accounts payable focusing the textile sector. They used demand for trade credit, credit worthiness, access to capital markets, internal financing, price discrimination, cost of alternative capital, firm growth and size as independent variables and accounts receivable/assets ratio as dependant variable in determining accounts receivable. The findings show that accounts receivable are strongly affected by the firm's incentive to use trade credit as a means of price discrimination and level of internal financing. Additionally, the firm size also affects the level of accounts receivable a firm maintains.

Ljubić and Mance (2008) determined a model of accounts receivables risk management for Bosnia and Herzegovina's business environment. The conducted research and analysis of existing models of accounts receivable collection risks, created a new model of collection risk management suitable for the business

environment found in Bosnia and Herzegovina. The model is also applicable in other similar transition economies lacking the modern market economy features. The proposed model is based on cash flow indicators, working capital and asset ratios, current and quick ratios, and debt-equity ratios. It is optimal in assuring against accounts receivable payment risks in Bosnia and Herzegovina.

### 5- Research variables

In this research, the dependent variable is a dummy variable shown in binary form, and defined by the value added indicator. Value added is as a criterion to differentiate between profitable and non profitable enterprises and calculated by the following formula base on Biswal, Samantaray and Sahoo's research

$$\text{Value added} = (\text{Net profit}) / \text{Equity} \times 0.04$$

Enterprises having this rate greater than 1 are profitable and the other having this rate lower than 1, are not.

Independent variables were shown in the following table. They are determined based on Biswal, Samantaray and Sahoo research as well as Alikhan, Tragar and Bhutto' research.

*Table 1: independent variables*

	<b>variables</b>	<b>Definition</b>
<b>Liquidity Indicators</b>	1. Current Ratio	Current Assets/ Current Liabilities
	2. Working Capital to Total Assets Ratio	(Current Assets – Current Debt)/ Total Assets
	3. Quick Ratio	(Current Assets – Inventories)/ Current Liabilities
<b>Cash Flow Indicators</b>	4. Cash Flow Ratio	Free Cash Flow/ Current Liabilities
	5. Free Cash Flow Ratio I	(Operating CF ± Investment CF)/ Total Liabilities
	6. Free Cash Flow Ratio II	Net Cash Flow of all activities/ Total Liabilities

<b>Solvency Indicators</b>	7. Gearing Ratio	Non-current Liabilities/ (Non-current Liabilities + Equity)
	8. Debt Ratio	Total Liabilities / Total Assets
	9. Debt-to-Equity Ratio	Total Liabilities / Equity
<b>Other variables</b>	10-Price Discrimination	margin (sales minus variable costs) / assets
	11-Firm growth	The rate of year sale
	12-Firm size	Log total assets

## 6-Research Methodology

### 6-1- Sample Definition

Research samples consist of 77 companies listed on Tehran Stock Exchange. The observed period covers 5 years, between 2007 and 2011. Finally, companies considering the following features were selected:

- i. They are selected for this study on the basis of high sales turnover
- ii. They were accepted on TSE before 2006
- iii. In terms of increase comparability, their fiscal year ends to march.
- iv. They are manufacturing companies
- v. During the research period, the company is not omitted from TSE

### 6.2. Logistic Regression Model

Since the dependent variable (value added) is a binary variable, the Wald logistic regression technique is used to confirm the relationship between value added and independent variables

The binary logistic regression is the following:

$$E[Y] = \frac{e^{\beta_0 + \beta_1 X}}{1 + e^{\beta_0 + \beta_1 X}}$$

The Wald significance test is used to test each and every variable. The model as a whole is tested on Nagelkerks  $R^2$ , and Hosmer & Lemesh  $\chi^2$  test.

The model's function is the following:

Company type = f (CR, WCTA, QR, CFR, FCF1TD, FCF2TD, GR, D-E, PD, FG, FS)

Where:

Company type: binary variable with values: 0 (bad) and 1 (good).

CR: current ratio

WCTA: working capital to total assets ratio

QR: quick ratio

CFR: cash flow ratio

FCF1TD: free cash flow 1 to total liabilities ratio

FCF2TD: free cash flow 2 to total liabilities ratio

GR: gearing ratio

DR: debt ratio

D-E: debt-to-equity ratio

PD: Price Discrimination

FG: Firm growth

FS: Firm size

The following table shows the coefficients for each indicator, its significance and the results of the Wald test:

**Table2: Wald Test**

variables	Score	Sig.
CR**	4.416	.036
WCTA	.003	.959
QR	.030	.862
CFR	.314	.575
FCF1TD	.124	.724
FCF2TD	.280	.597
GR	1.894	.169
DR*	17.316	.000
D-E	1.329	.249

PD*	53.978	.000
FG*	8.148	.004
FS	.034	.854
Overall Statistics	76.054	.000

\* Indicator Is Statistically Significant At 95% Level

The base on table2,the computed logistic regression function is as follows:

$$\text{Log (Tip)} = 76.054 + 4.416(\text{CR}) + 17.316(\text{DR}) + 53.978(\text{PD}) + 8.148(\text{FG})$$

The displayed results of the multivariate analysis show that the affiliation of a particular group of companies with regard to whether a company creates value-added is associated with the performance of the debt ratio and price discrimination and firm growth and current ratio at the level of confidence of 95%. Within the parameters of the analyzed model, other variables were unable to show statistically significant difference in the companies belonging to the group of good or bad. According to the presented results, it may be concluded that the statistically significant variables include current ratio of liquidity indicators; debt ratio of solvency indicators and firm growth as well as price discrimination of other variables , while the variables representing the indicators of cash flow are not statistically significant when estimating the risk of collection of receivables. This was expected because of the liquidity nature of the claim itself.

The most significant indicators at the 95% significance level are the PD with the value of 53.978. Other indicators ranked according to their importance are: DR = 17.316, FG = 8.148 and the CR = 4.416 may also be included.

The accuracy of the model is shown in the next table:

**Table3: Model Accuracy**

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R <sup>2</sup>	df	Sig
1	116.882 <sup>a</sup>	.099	.293	11	.010

It is visible from the table3 and based on the Nagelkerke R<sup>2</sup>, that the regression function relatively fairly explains the risk of default on the liabilities. However, when the logistic regression model is used, the pseudo R<sup>2</sup> results are insufficient, so a more precise significance test based on the maximum likelihood

Hosmer & Lemeshovim  $\chi^2$  test. It is visible from the table that the  $\chi^2$  test is statistically significant at the 0,010 level, which confirms the conclusion based on the Nagelkerke  $R^2$ , that the model fairly explains the data from which it was derived and has high accuracy which can also be tested by comparing the hit rate of classified enterprises.

**Table 4: Model Accuracy (B)**

Observed		Predicted		
		VAR00001		Percentage Correct
		0	1	
Step 1	0	0	20	.0
	1	0	358	100.0
Overall Percentage				94.7

The results of table4 show that the model’s prognostic accuracy has reached a satisfactory 94.7%. It is better in detecting bad enterprises (0), as opposed to the good ones (100%).

**7-A Model of Accounts Receivables Risk Management**

Based on the results of the regression analysis, following indicators were identified as having the largest impact on defining the instruments that could be used as collateral (secured lending also known as asset-based lending), promissory note ( Bank note) or some other form of insurance of receivables collection:

1. Price Discrimination (coefficient 53.976)
2. Debt ratio (coefficient 17.361)
3. Firm growth (coefficient 8.148)
4. Current ratio (coefficient 4.416)

In the accounts receivable risk management model, these values need to be observed according to their relative impact. When selecting the insurance instrument, the value of debt should be taken relative to its total size and ratio to total income. Accordingly, the value of the indicator should be observed inversely to the debt amount and insurance instrument.

<b>Table: A Model of Accounts Receivable Risk Management</b>		
Indicators in relation to control measures	Debt in % of total revenue	Insurance instruments
All indicator good	between 20,01 and 25%	collateral, mortgage, letter of credit, promissory not

The results indicate that if the receivables' value, on the other hand, amounts to 25% or more of all claims, collaterals will be asked. It has been shown that it is possible to construct a corporate system of receivables collection risk management in Iran's system of payments that could safeguard the lenders from debtor's default.

The created model is optimal for Iran because it was based on datasets from financial reports of Iranian companies and it shows that collaterals and the other form of insurance instruments really used in this country.

**8. Conclusion**

One the most reason why companies offer trade credit is that it helps to increase sales revenues. Therefore, there is a risk involved. In particular, the credit risk exists as the company offering trade credit is exposed to the possibility that the debt will not be paid on time or at all.

In order to reduce the risk involved in trade credit offering, a company should apply a credit management process. The credit management process should begin with defining the credit goal and then defining the company's credit policy, but the accounts receivable collection risk cannot be fully avoided, and cannot be reduced by the full amount. Nevertheless, it can be reduced to an acceptable, tolerable and reasonable measure that does not jeopardize the business success and long-term business goals. Whereas the problem of receivables collection is complex and there aren't legislative, executive and judicial authorities, mortgages and the other instruments of insurance of receivables, are insufficient means of guarantee.

We presented a model of receivables accounts risk management in this paper. The proposed model is

based on price discrimination, debt ratio, firm growth and current ratio. The results of analyzing variables with using logistic regression method show if the receivables' value, on the other hand, amounts to 25% or more of claims, collaterals and the other form of insurance instruments will be asked. This model is suitable in Iran business environment and it's different with prior researches model.

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