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The Economic Evaluation and Financial Analysis of Dairy Farms in Chahar Mahal and Bakhtiari Province (Case Study of Shahrekord County)

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Abstract:

This study aimed to measure total factor productivity by considering two new approaches in industrial dairy farms in Shahrekord County. The necessary data were collected through completion of questionnaire from 40 dairy farms by stratified random sampling method in the year 2012. In this study, the cost of foods, Initial cost of milk production, net present value of (NPV), total factors productivity (TFP) and Break-Even point (BEP) for milk production were investigated. The results showed that average gross income and total production cost were less in small and medium farms as compared to large farms. Financial and economic indicators showed the average profitability and financial feasibility of these types of activities and we founded those Policies to maintain stable revenues from the dairy farm inputs prices were higher priority than stability for Production inputs. It was mainly in the higher unit capacity, the net present value of the project increases. The results showed that TFP index of the farms studied was equal to 1.34. The cost of food on, Industrial, semi-industrial and traditional factory farms is 4850, 4503 and 4401 Rials per kg of milk respectively. Also Break-Even Point analysis of milk price per year for each unit of industrial, semi-industrial and traditional on 2012 was 6586.8, 6558.32 and 6213.95 Rials respectively. Sell for less than these amounts lead to economic losses for farmers and Production units will not be able to recoup their fixed and variable costs. In summary, if dairy projects are analyzed based on the financial evaluation, Economic evaluation will have a greater profitability and this has been indicated that assistance from the government is supporting these units.

Key words: Investment projects, Benefit cost ratio, Financial and economic project appraisal, Dairy husbandry, Net Present Value, Shahrekord County.

Introduction:

Agricultural and animal husbandry production projects have a special place in terms of allocation of resources and inputs [Akbari, 2006; Sharma, 1993]. Financial and economic assessment of agricultural projects such as dairy husbandries is one of the most important activities in the agricultural sector and is

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very important [Akbari,2006;Haji Rahimi,2009]. Knowledge achieved that the profitability of dairy farms on the basis of activity indices and economic analysis is very important to get optimal decisions in investments in these sectors. Production per unit of production requires, these factors are combined with human conscious. A traditional method of industrial production in the livestock industry has changed [Diewert, 1992; Sholeh, 2012; Wang, 2005]. Activities, such as dairy farms are of important agricultural activities and awareness and profitability condition of these farms for the purpose of investment and financial planning can be very effective. Hence, in this study, net present value of NPV, cost, benefit ratio, total productivity, benefit, cost ratio and net present value NPV are used [Sharma,1993: Faostat,2009; Wang,2005]. Chaharmahal and Bakhtiyari province is one of the 31 provinces of Iran. It lies in the southwestern part of the country. Its capital is Shahrekord city and it has 6 other counties [Sholeh, 2012]. The province is mainly active in the agriculture and animal husbandry sector. 420 tons of milk are produced daily in Chahar Mahal and Bakhtiari province and more than 85 percent of this is for the rural units and non-industrial farms [Sholeh, 2012; Wang,2005]. Dairy farmers in rural areas have less knowledge of scientific methods of breeding calves and they are very high risk to investments [Sholeh, 2012; Mashayekhi,2011]. Some Studies have shown many rural herders Ranchers do not observe the principles of milking and calf rearing [Dashti,2009; Sholeh,2012]. The management program of the dam affects the quality and amount of their milk and this is very important to get interest or benefits from them [Dashti,2009]. Requires abundant production of dairy products, especially milk and limited production requires, shows that Necessary for attention to optimal use of resources and increase productivity [Sholeh,2012; Wang, 2005]. productivity indices used in the economic analysis And has ability to use to describe and desired position of unit and show Qualitative and quantitative changes in that unit. The objective of this study was to investigate The Economic Evaluation and Financial Analysis of Dairy Farm in Chahar Mahal and Bakhtiari Province (Case Study of Shahrekord County) to interpret the present situation and guidelines to improve investment for dairy farmers' and the government.

Material and methods:

For this study 40 dairy farm of Chaharmahal and Bakhtiyari province (Just located on Shahrekord county and its Suburbs) were selected randomly (n=40) since 2011 to 2012. Data collected by questionnaire with visiting dairy farm by researcher and colleagues. Dairy farms were selected as a stratified and randomly (Stratified random sampling model) [Musgrave, 1989; Zarifian, 2010]

Literature:

The variables studied in this experiment were: Initial cost of milk production, net present value (NPV), Total factors productivity (TFP), Break-Even Point for milk production (BEP) [Mahmoodieh, 2012; Zarifian, 2010].

Since the most important project evaluation criteria, is the net present value method, we use that to assess the NPV for dairy farms by following formula:

$$NPV = \sum_{t=1}^n \frac{Bt - Ct}{(1+i)^t}$$

Ct: Cost /year_t **Bt:** Benefit /Year_t **n:** years **i:** Discount rate

Calculation of costs and benefits (B/F ratio):

For this at First of all revenues and costs were converted to year zero value, then the cost ratio is achieved.

If this ratio is greater than 1 project is economically feasible but if this ratio is smaller than 1 an economic project is not economically [Mashayekhi, 2011].

$$BCR = \frac{\sum_{t=1}^n \frac{B_t}{(1+i)^t}}{\sum_{t=1}^n \frac{C_t}{(1+i)^t}}$$

Calculate the total factors productivity (**TFP**): TFP is the production of goods and services than effective input in the production of goods or services. Based on this definition production unit which has the largest amount of total factors productivity is considered as the most efficient unit [Mahmoodieh, 2012; Mashayekhi, 2011].

$$TFP_i = \frac{TR_i}{TC_i}$$

TR_i : Gross revenue of the production unit

TC_i : The total cost of the production unit

$$TC_i = \sum W_j C_{ji}$$

TC_i =Total Cost of Production

C_{ij} =i Input costs in j dairy farm

W_j =Weight input j

Calculate the initial cost of milk: we calculated initial cost of milk production by this following formula [11, 12]:

$$P_t = (V_{cm} + F_{cm} + O_{cm}) - R_m$$

P_t = Cost of milk /kg

V_{cm} = Variable costs of milk production

F_{cm} = Fixed costs of milk production

O_{cm} = Opportunity costs of assets of milk production

R_m = Other incomes

Calculate the Break-Even Point of Production (BEP):

The purpose of break-even analysis is to provide a rough indicator of the earnings impact of a marketing activity. The break-even level or break-even point represents the sales amount, in either unit or revenue terms, that is required to cover total costs (both fixed and variable). Profit at break-even is zero. Break-even is only possible if a firm's prices are higher than its variable costs per unit. If so, then each unit of the product sold will generate some "contribution" toward covering fixed costs. In economics and business, specifically cost accounting, the break-even point (BEP) is the point at which cost or expenses and revenue are equal: there is no net loss or gain, and one has "broken even." A profit or a loss has not been made, although opportunity costs have been "paid," and capital has received the risk-adjusted, expected return. In short, all costs that need to be paid are paid by the firm but the profit is equal to zero [Mahmoodieh, 2012; Mashayekhi, 2011].

$$P_{bl} = TFC_c / Y + V_{cm}$$

Pbl = Break-Even price

TFC_c = the total fixed costs for each dairy cow

Y=Milk price, **V_{cm}**= Milk cost /kg

Then earned data were collected and analyzed by using the Pearson correlation coefficient [12, 16].

Results and discussion:

Table-1- Sensitivity analysis of **dairy farms**

Conditions	The mean value of the net state dairy farms Million Rial
Before performing sensitivity analysis	1901.5
After rising costs	-624.7
After falling revenues	-2076.1

Result showed that generally, what is the capacity of units lean to big, the net present value of the projects increases. In the sample studied, the average initial investment unit's, average running costs and average earnings were 1998.4, 2012.17 and 2925.4 million Rial respectively. According to the result whit 25 percent increase in fees or 25 percent of revenues dairy farmers are affected and Profitability disappears. According to the results the mean value of the net state dairy farms before performing sensitivity analysis was 1901.5 Million Rials and after rising costs was -624.7 Million Rials and after falling revenues was -2076.1 Million Rials with 25 percent increase in costs average net present value decreased to the -624.7million Rial so these designs are so disadvantages economically.

Table-2- Comparison of financial and economic indices of dairy farms

Evaluations Methods	NPV Million Rial	IRR%	BCR
Financial Analysis	1601.24	25	1.07
Economic al Analysis	1122.14	20	1.04
The difference between the two methods	479.10	25	0.03

The difference between financial and economic analysis showed that the average net present value in financial analysis of 479.10 million riyals more than the amount of the economic analysis, despite these differences shows the compliance status of projects in the decisions based on these two methods. In summary, the farm plans based on financial assessment are analyzed, with greater profitability than the economic evaluations are. This would indicate that is the contributions made by the government in support of these units.

Data from table -3 showed that due to the increasing number of milking animals is evident that the larger units will increase milk production. The results also showed that average milk yield increases with increasing herd size. These results are in agreement with result of [Rahmani, 2007].

Table-3- Milk production performance in **dairy farms** (kg/head cow)

Groups	Average	Minimum	Maximum	Standard deviation
Small Herds	8600	6200	9840	821.40
Medium Herds	9210	7000	10250	742.21
Large Herds	9840	7520	10900	938.50

Data from table - 4 showed that More than 79 percent of the gross incomes of dairy farms are from the sale of milk produced. After milk production cow are Bulls payoff, sell the males and heifers and manure incomes respectively. Data showed that gross income of large herds is more than medium herds and small herds had lesser gross income between them.

Table -4- Gross Income of dairy farms

Title	Small Herds	Medium Herds	Large Herds
Milk	51600	55260	59040
Bulls payoff	3710	4270	5400
Sell the male calves	4000	3600	3810
Sell the Heifers	3900	4610	5390
Manure	450	420	490
Total	63660	68160	74130

Since housing costs are divided into two parts (fixed or variable cost), their fixed and variable costs are divided into two groups too (Palpable and Impalpable) which generally not considered in evaluating profitability by ranchers but they are very important.

The results from table 5- showed that the total cost of production in small and medium farms were higher than large farms. Fixed cost (Palpable and Impalpable) for small herds is higher than others. Fees structure of dairy farms indicates that less than 10% of the studied dairy costs, are related to fixed costs and other costs is related to variable costs. Total cost for large herd farms was higher than medium and small herd farms. Results of this experiment are in agreement with result of [Musgrave, 1989; Rezvanfar, 2007].

Table -5- Evaluation for production costs of dairy farms

Title		Small Herds	Medium Herds	Large Herds
Fixed costs	Palpable	470	400	299
	Impalpable	5340	4910	4420
	Total	5810	5310	4719
Variable costs	Palpable	42170	39700	45820
	Impalpable	3420	3100	3200
	Total	45590	42800	49020
Total cost of production	--	51400	48110	53739
Gross Income	--	63660	68160	74130

Factor productivity is about 1.23 and about 1.41 and about 1.38 times for small, medium and large herds farmers respectively. Total factor productivity is about 1.34 times the flower farms studied. It means when the farmers use 1 unit of their investiture they can raise it to 1.34 units and the benefit for this interest is 0.34 times per unit. Results of this experiment are in agreement with result of [Hoffman, 2006; Musgrave, 1989; Rezvanfar, 2007].

Table -6- The mean and dispersion of productivity of total factor productivity index

Groups	Number of samples	Average	Standard deviation
Small Herds	16	1.23	0.124
Medium Herds	14	1.41	0.141
Large Herds	10	1.38	0.521
Total	40	1.34	0.110

The mean and dispersion of productivity of total factor productivity index showed that farms which in this study are in Break-Even point of their productions.

Investigate the mean of milk cost showed that feed cost percentage increases in industrial and semi-industrial dairy farms and it was at the lowest in traditional dairy farms, but the milk cost was at the lowest in traditional farms. Result showed that in traditional dairy farms farmers has lesser feed/milk cost ratio. In addition we found that there is a linearly relationship between feed cost and milk cost for each cow and when feed cost increases milk cost will be raise too. The results of these experiments confirm the results of [Hoffman, 2006; Musgrave, 1989; Rezvanfar, 2007; Zarifian, 2010] experiments.

Table -7- Calculate the mean of milk cost of dairy farms

Groups	Feed cost	Milk cost	Feed/milk
--------	-----------	-----------	-----------

	%	(Rials)	(Rial/Kg)
Industrial	65.35	7423.1	4850
Semi- Industrial	65.30	6896.2	4503
Traditional	69.50	6333.5	4401

Data from table -8 showed that fixed and variable costs for each cow or per produced milk liter. Fixed and variable costs per each cow or each liter of milk production decreased in traditional farms and increased in industrial and semi-industrial farms. It means traditional farms have lesser cost for each cow to keep but when the number of cows raises the feed cost increased linearly.

Table -8- investigation Break-Even point for each kg Milk per Head Cow on dairy farms

Groups	Fixed costs/cow (Rials)	Variable costs / liter (Rials)	BEP	
			Daily	Monthly
Industrial	1643015	4976	671.44	22.38
Semi- Industrial	1517537	4824	732.40	24.41
Traditional	1140450	4432	599.60	19.98

Investigation for milk Break-Even production point of dairy farms showed that daily Milk production Break-Even point for Industrial, semi-industrial and traditional dairy farms were 671.44, 732.40 and 599.60 respectively.

Milk production Break-Even point for Industrial, semi-industrial and traditional dairy farms were 22.38, 24.41 and 19.98 respectively. These data's that showed traditional dairy farms has lesser BEP than other dairy farms.

Table -9- investigation of Break-Even point for Monthly Milk production

Groups	Fixed costs (Each head cow) (Rials)	Variable costs (Each liter milk) (Rials)	Monthly Production (kg)	BEP
Industrial	1643015	4976	1020	6586.80
Semi- Industrial	1517537	4824	875	6558.32
Traditional	1140450	4432	640	6213.95

The BEP for each kilogram of milk on 2012 was 6586.80, 6558.32 and 6213.95 for Industrial, semi-industrial and traditional dairy farms respectively. Data that showed traditional dairy farms have lesser BEP and industrial dairy farms have more BEP Index (table -9).It seems sale the milk under this

cost lead to disadvantages for farmers that they can't manage their farms and continue their productivity actions [Mashayekhi,2011; Rezvanfar,2007; Zarifian,2010].

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Effect of use cumulative levels of sesame (*Sesamum Indicum-L*) meal with phytase enzyme on performance of broiler chicks

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Abstract:

For investigate the effect of feeding the levels of Sesame meal (SSM) for Soybean meal (SBM) with the phytase enzyme (Phy) on performance of broiler chickens, total 384 one days old broilers chickens (Ross 308) at completely randomized factorial design with 4 treatments of use sesame meal in 2 level of using phytase enzyme with 4 replicates were used. At the end of the trial 2 birds from each pen was slaughtered Carcass weight, dressing, abdominal fat, and intestine weight were also measured. To evaluate the digestibility of phosphorus (P.DI) 0.3 % Dichromium trioxide Marker Cr₂O₃ was used. Data showed that use of SSM lead to increase broilers feed intake FI (P<0.05). Interaction effects between SSM×Phy lead to higher FI significantly (P<0.05). Use of sesame meal and addition enzyme had no significant effect on FCR significantly. Data from this study showed that levels of Calcium and Phosphorus in blood and Tibia ash were increased were SSM and Phy enzyme used (P<0.05). Antibody titer against New Castle Vaccine was not changed. Evaluation of Phosphorous digestibility showed that using SSM with Phy enzyme can increase PDI significantly (p<0.05). As result was relevant small intestine mucosa and sub mucosa diameters were significantly increased when we used experimental diets (p<0.05). Musclaris and serosa diameter were higher in T₂, T₃ than others. Data from this study showed use of SSM in broilers diets is likely to increase total diameter of small intestine parts (p<0.05).

Abbreviations: FI, Feed intake; BW, Body weight; FCR, Feed conversion ratio; Phy, Phytase enzyme P.DI, Phosphorous digestibility; SBM, Soybean meal ;SSM ,Sesame seed meal.

Key words: Sesame meal, Phytase enzyme, Broilers, Blood parameters, Intestinal morphology.

Introduction:

The insufficient production of soybean meal (SBM) in Iran has lead to permission being granted for an import of this product form other countries such as Brazil, China and Argentina. However today the price is considerably still high due to government policy which also on the other hand has to encourage soybean growers in the country. Search for alternative vegetable protein sources, which are cheap and locally available, has become an urgent subject to poultry nutritionists in Iran. In addition one of the methods for increase in productive of broilers is appending medical plants to poultry diets as nutritional and medical sources (Darrell J. Bosch, et al,1997; Deyab, D. M et al ,2009).Sesame (*Sesamum indicum L*) seed is a drought, tolerant crop adapted to many soil types (1, 2). Full fat sesame seed and the meal after

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oil extraction are not only excellent sources of edible nutrients (45 to 50% lipid, 15 to 20% protein, and 10 to 15% carbohydrate and 47.1% to 52.9% crude protein, respectively. (Al Harthi, M. A.,2009; Deyab, D. M et al ,2009). The amino acid composition of the protein is similar to that of soybean meal with the exception of lower lysine and higher methionine in sesame .The fiber content of the seed ranges from 2.7 to 6.7% (36).The high amount of calcium (CA) and Phosphorus (P) are also less available due to its high phytic acid content. Some studies that showed phytic acid could be eliminated when the meal was heated under 15 Psi for 4 hours (Kies, A.K.2001: Lease, J.G, 1996). Phytase enzyme (Phy) utilization as an additive Supplementation in poultry diets has extensive due to public concern surrounding phosphorus pollution, and its ability to increase non phytate phosphorus (NPP) utilization. Phytic acid also reduces the activity of pepsin, trypsin, and α -amylase (Hirose.N,1991; Kanekol.K,2002; Sing.M et al,1982).Phytase enzyme supplementation has been shown to reduce phosphorus and nitrogen excretion and it can use full for increase digestibility an availability of phytate bound some mineral such as phosphorus, calcium, copper and zinc (Gordon.R.W,1998; John.G,1196).Phytase as an enzyme is capable of breaking down phytates in feeds to release inorganic phosphorus and inositol as well as protein, amino acids, trace minerals and other nutrients chelated with phytase. Thus, phytase can reduce or eliminate the supplementation of inorganic phosphorus in feeds for monogastric animals and improve the utilization efficiency of these nutrients contained in feedstuff. As much as 90 % of the total phosphorus in cereals and oilseeds can be locked up in the form of phytate, which is a virtually indigestible form of phosphorus in plants used in animal feeds (Lease, J.G, 1966; Namkung,H. .1997).The enzyme phytase is a novel and cost effective tool in poultry diets that improves phosphorus utilization from phytin, the storage form of phosphorus in feedstuffs. As phosphorus retention is still far below a hypothetical maximum of 100% considerable room for improvement in phytin-phosphorus release and overall phosphorus retention by poultry and swine still exists(YoungL.G,1993; Yung-Shin.S.H.,2002). Many studies that showed SSM could be used instead of SBM at 15-25 % in broilers diet and the higher levels of use SSM caused higher fat deposition and lower protein content of the broilers carcass (Sebastian.S., et al, 1998; Yamashita.K et al, 1995; Yamashita.K.et al, 2006).The important of SSM use for broilers seems to become more popular as poultry feed due to its low price (Agbulu, O., 2010; Al Harthi, 2009). As mentioned above it has become clear that there is a quite bite of benefits of sesame meal as good source of protein and a medical and nutritional resource to be used for poultry. Therefore, the objective of this study is to investigate the effect of feeding cumulative levels of SSM as a replacement for SBM with the supplementation of phytase (Phy) on performance, blood constituents and carcass traits and intestinal morphology of broiler chickens.

Materials and Methods:

For investigation the effect of use cumulative levels of sesame meal with phytase enzyme on performance of broiler chickens a total 384 one day broilers chicks (Ross 308) were used at completely randomized factorial design with 4 treatments of use sesame meal in 2 level of using phytase enzyme with 4 replicates for each of them. The experiment was carried out in 49 days. Each treatments group was fed on a starter diets. Sesame meal purchased from local market and dried and then grounded separately to a fine powder and then mixed with the basal diet (Tables 2) Feed and fresh water were provide ad libitum during this experiment. Sesame meal sample was analyzed in the lab for determine amount of ME, Crude protein,

Calcium, Phosphorus and Its Crude fiber with (AOAC, 1994) method (Table 1)

Table 1 – Chemical Composition and proximate analysis of the tested diets

Compounds	ME (Kcal/Kgr)	CP (%)	Met+Cys (%)	Lys (%)	Ca (%)	A.P (%)
Sesame meal	2210	41	1.94	0.90	0.91	0.52
Soybean meal	2230	42	1.28	2.69	0.29	0.27
Corn grain	3350	8.33	0.36	0.26	0.02	0.08
DCP	--	--	--	--	22	16
Vegetable Oil	9400	--	--	--	--	--

Treatments were Control (contain control group, basal diet with no substitution SSM for SBM), T₁ (basal diet with 5% SSM), T₂ (basal diet with 10% added SSM), T₃ (basal diet with 15% added SSM) for 0-21 days (first diet) and Control diet , T₁ (basal diet with 10% SSM), T₂ (basal diet with 15% added SSM), T₃ (basal diet with 20% added SSM) for 21- 42 days (Grower diet) and Control diet , T₁ (basal diet with 15% SSM), T₂ (basal diet with 25% added SSM), T₃ (basal diet with 30% added SSM) for 42-49 days (finisher diet) with or with out phytase enzyme E₀ and E₁ (500 FTU/ Kg of Nataphous 5000) that they were balanced according to their requirement as shown in (NRC for poultry ,1994)

Body weight, body weight gain, feed consumption, and feed conversion ratio were weekly calculated. At the end of the experiment, estimated slaughter yield were also carried out by randomly using two broilers around the average body weight from each treatment group. Selected chickens were deprived from feed for 12 hours, weighed and were slaughtered to complete bleeding (totally 64 bird), followed by plucking feathers then weighted. Carcass weight, dressing, abdominal fat, and intestine weight were recorded and intestine length was also measured. Blood samples from each bird were collected for determine their triglyceride, calcium and phosphorus in blood samples and tibia ashes were measured (Gordon.R.W, 1998). Some blood samples were analyzed for their antibody titers against New Castle Vaccine by Haemagglutination inhibition test (HI).Finally samples from small intestine tissue to determination intestinal morphology were collected.

Table 2.1- Calculated composition and nutrients contents of experimental diets (0-21) days

Ingredients %	Control	T ₁ (5% SSM)	T ₂ (10% SSM)	T ₃ (15 % SSM)
Corn grain	54.71	55.48	55.23	55.20
Soybean meal	39.02	33.77	28.95	24.15
Sesame meal	0	5	10	15
Vegetable Oil	2.1	1.8	2	2
DCP	1.68	1.56	1.49	1.41
Oyster shells	1.5	1.45	1.42	1.36
Methionine D-L	0.14	0.09	0.06	0.03
Nacl	0.25	0.25	0.25	0.25
Vitamin Premix*	0.30	0.30	0.30	0.30
Mineral premix*	0.30	0.30	0.30	0.30
Calculated nutrient content				
ME(Kcal/Kgr)	2900	2900	2900	2900
CP (%)	20.84	20.84	20.84	20.84
Ca (%)	0.90	0.90	0.90	0.90
Available Phosphorus (%)	0.41	0.41	0.41	0.41
Lysine (%)	1.17	1.17	1.17	1.17
Methionine+Cystine (%)	0.81	0.81	0.81	0.81

Supplied Per Kilogram Of Feed: 7.500 IU of vitamin A, 2000IU vitamin D3, 30 Mg vitamin E,1.5 µg vitamin B12,2Mg B6,5Mg Vitamin K,5 Mg vitamin B2,1 Mg vitamin B1,40 Mg nicotinic acide,160µg vitamin Biothine,12 Mg Calcium,pantothenate,1Mg,Folicacide 20 Mg Fe,71 Mg Mn,100µg Se,37Mg Zn,6 Mg Cu,1.14 Mg I,400 µg Cu.

Table 2.2- Calculated composition and nutrients contents of experimental diets (21-42) days

Ingredients %	Control	T ₁ (10% SSM)	T ₂ (15% SSM)	T ₃ (20 % SSM)
Corn grain	60.98	62.32	62.30	61.21
Soybean meal	32.81	22.42	17.60	13.23

Sesame meal	0	10	15	20
Vegetable Oil	2.4	1.9	1.95	2.35
DCP	1.25	1.02	0.96	0.89
Oyster shells	1.67	1.50	1.40	1.47
Methionine D-L	0.04	0	0	0
Nacl	0.25	0.25	0.25	0.25
Vitamin Premix*	0.30	0.30	0.30	0.30
Mineral premix*	0.30	0.30	0.30	0.30
Calculated nutrient content				
ME(Kcal/Kgr)	3000	3000	3000	3000
CP (%)	18.75	18.75	18.75	18.75
Ca (%)	0.84	0.84	0.84	0.84
Available Phosphorus (%)	0.33	0.33	0.33	0.33
Lysine (%)	1.03	1.03	1.03	1.03
Methionine+Cystine (%)	0.67	0.67	0.67	0.67

Supplied Per Kilogram Of Feed: 7.500 IU of vitamin A, 2000IU vitamin D3, 30 Mg vitamin E,1.5 µg vitamin B12,2Mg B6,5Mg Vitamin K,5 Mg vitamin B2,1 Mg vitamin B1,40 Mg nicotinic acide,160µg vitamin Biothine,12 Mg Calcium,pantothenate,1Mg,Folicacide 20 Mg Fe,71 Mg Mn,100µg Se,37Mg Zn,6 Mg Cu,1.14 Mg I,400 µg Cu.

Table 2.3- Calculated composition and nutrients contents of experimental diets (42-49) days

Ingredients %	Control	T ₁ (15% SSM)	T ₂ (20% SSM)	T ₃ (25 % SSM)
Corn grain	64.27	64.50	64.40	64.40
Soybean meal	29.02	14.26	9.40	4.50
Sesame meal	0	15	20	25
Vegetable Oil	3.2	3.15	3.20	3.20
DCP	1.06	0.77	0.68	0.65
Oyster shells	1.60	1.47	1.43	1.40
Methionine D-L	0	0	0	0
Nacl	0.25	0.25	0.25	0.25
Vitamin Premix*	0.30	0.30	0.30	0.30
Mineral premix*	0.30	0.30	0.30	0.30
Calculated nutrient content				

ME(Kcal/Kgr)	3100	3100	3100	3100
CP (%)	17.43	17.43	17.43	17.43
Ca (%)	0.77	0.77	0.77	0.77
Available Phosphorus (%)	0.29	0.29	0.29	0.29
Lysine (%)	0.94	0.94	0.94	0.94
Methionine+Cystine (%)	0.58	0.58	0.58	0.58

Supplied Per Kilogram Of Feed: 7.500 IU of vitamin A, 2000IU vitamin D3, 30 Mg vitamin E,1.5 µg vitamin B12,2Mg B6,5Mg Vitamin K,5 Mg vitamin B2,1 Mg vitamin B1,40 Mg nicotinic acide,160µg vitamin Biothine,12 Mg Calcium,pantothenate,1Mg,Folicacide 20 Mg Fe,71 Mg Mn,100µg Se,37Mg Zn,6 Mg Cu,1.14 Mg I,400 µg Cu.

To measurement the digestibility of phosphorus 0.3 % Dichromium trioxide Cr_2O_3 Marker (Merk Germany) was used, and then digesta content from Meckel's diverticulum due to ileum terminal was Sampled and PDI calculated from fallowing formula (Fenton,TW., and M.Fenton,1979):

Phosphorus Digestibility %: $(\text{Phosphorus}_{\text{diet}} / \text{Phosphorus}_{\text{fecal}} \times Cr_2O_3_{\text{diet}} / Cr_2O_5_{\text{fecal}} - 100) \times 100$

In the last data were collected and analyzed by using the General, Linear model procedure of (SAS User's Guide ,1992) different means Duncan's multiple ranges test was used to detect the differences at level ($p < 0.05$).

The statically model was:

$$X_{ijk} = \mu + \alpha_i + \beta_j + (\alpha + \beta)_{ij} + e_{ijk} \quad i = 1,2,3,4 \quad j = 1, 2$$

X_{ijk} = Average Effect Observed

μ = Total Average

α_i = Effect of Substitution SSM for SBM

β_j = Effect of Phytase Enzyme

$(\alpha + \beta)_{ij}$ = Interactions (SSM \times Phy)

e_{ijk} = Effect of Errors

Result and Discussion:

Data of feed intake, broiler weight and FCR are in (Table 3). Data showed significant difference about Feed intake in trial groups. Chicks were fed with T_3 diet was higher FI among others groups. (SSM \times Phy) Interaction lead to higher feed intake on T_3 . Addition Phy enzyme didn't significant effect on FI.Bw Gain in control groups was higher than others significantly ($p < 0.05$). In fact, consumption of SSM increased FCR and addition of Phytase couldn't any benefit effect for FCR. Some researchers that showed live body weight and body weight gain of 6-week old broiler chicks fed the control diet were significantly ($P \leq 0.05$) higher than those of all other dietary treatments. However, body weights and body weight gains of broilers fed diets containing 50% of either SSM or soybean meal SBM were significantly lower than those of the control diet (Yamashita K., et al, 1992; Yamashita K., et al, 1995).phytase levels lower than 500 FTU/kg had no impact feed intake and feed conversion efficiency. (Alharti et al, 2009) showed That although all diets utilized in their studies were formulated to be Isocaloric. There was a very

huge variation in all performance criteria. This might be due to multiple reasons : 1- SSM dietary levels used were very high and caused a poor performance as a result of higher dietary SSM in conjunction with the poor amino acids quality in SSM and 2- There might be a variation in the determined TME values of SSM. The higher TME value for the sesame seed cake diets (15.2 MJ kg⁻¹) as compared to the SBM diets (14.8 MJ kg⁻¹) may have contributed to the improved performance observed for the SSM fed broilers. However, these reported data utilized lower dietary SSM levels than dietary SSM levels used in our trial. Phytase supplementation of Corn and Soybean meal based diets has been reported to improve BWG and FCR (Yamashita K., et al ,2006).The differences in the rate of feed intake as shown in the various treatments indicates that it was influenced by the amount of SSM present in the diet. On Yamauchi et al researches feed intake tended to increase with increasing dietary SSM level, it was not significant different among the 0, 10, 20, and 30% dietary SM groups Compared with the 0% dietary SSM group, they noticed The lack of improved growth performance, even in the high protein diets, might be related to the composition of the SM. Sesamin, a lignanin sesame seed oil, does not affect BW gain or feed intake at the 0.5% dietary diet level (Yamashita K., et al ,1995).(Hossain and Jauncey ,1989) suggested that the high phytic acid content of SM is a possible reason for its lower apparent protein digestibility. These reports indicate that lack of improved growth performance, even after feedings of the high protein diets in this study, could be caused by low protein digestibility due to the phytic acid in the SSM.The requirement of available P for broilers beyond 6 weeks of age is lower for growth performance than tibia ash (Gordon.R.W, 1998).Yamauchi et al that showed increase of use SSM lead to increase amount of feed in broilers but this increase is not significant (Yamashita K., et al ,1995; Yamashita K., et al , 2006). (Mehmet et al, 2005) that showed addition of Phytase enzyme can be useful on Increase in body weight. Similar findings were reported by previous research who reported (Sebastian.S et al.1998; Yi,Z.,E.T et al,1996; Zhaoguo.X.FZ. et al,2002) that phytase supplementation to broiler diets caused numerical improvement in feed efficiency of broilers fed a P-deficient diets fed without phytase.

Table 3 – The effect of use SSM ×Phy on broilers performance (0-49) days

Treatments	FI(Kg)	BW(Kg)	FCR (%)
SSM			
Control	90.7 ^c	47.9 ^a	1.89 ^c
T ₁	94.0 ^b	48.3 ^a	1.93 ^c
T ₂	95.8 ^a	43.2 ^b	2.20 ^b
T ₃	95.9 ^a	41.3 ^c	2.30 ^a
MSE	0.44	0.56	0.022
Phytase Enzyme (500FTU /Kg)			
E ₀	94.1 ^a	45.0 ^a	2.09 ^a
E ₁	94.2 ^a	45.4 ^a	2.08 ^a

MSE	0.31	0.40	0.015
(SSM ×Phy) Interaction			
Control× E ₀	90.3 ^c	47.1 ^a	1.91 ^c
Control × E ₁	90.1 ^c	48.6 ^a	1.87 ^c
T ₁ × E ₀	93.4 ^b	48.1 ^a	1.93 ^c
T ₁ × E ₁	94.6 ^{ab}	48.6 ^a	1.93 ^c
T ₂ × E ₀	96 ^a	43.5 ^b	2.20 ^b
T ₂ × E ₁	95.7 ^a	43 ^b	2.20 ^b
T ₃ × E ₀	96.5 ^a	41.2 ^b	2.33 ^a
T ₃ × E ₁	95.5 ^a	41.4 ^b	2.30 ^a
MSE	0.73	0.80	0.031

*Means within row with no common on letter are significantly different (p<0.05)

Data from (Table 4) showed bed moisture was increasing none significantly when increasing addition of SSM on broilers diets. This is may be due to the amount of protein in SSM that it needs more water is excreted from the body. In addition amount of water in SSM is high and this could increase litter moisture (Darrell J. et al, 1997). Antibody titers against New Castle Vaccine were measured and data from this test showed that antibody titers were not significantly differences when broilers fed with higher content of SSM .Data from Phosphorus digestibility that showed use Phytase enzyme can increase phosphorus digestibility significantly and PDI was higher on control groups. These results can be explained by that phytase enzyme had a positive influence on gastrointestinal tract digestive enzymes that leads to the increase in p digestibility observed in birds fed with SSM diets (Rutherford.SM. et al, 2002). Using enzyme lead to increase phosphorus digestibility in T₁ but on T₂ and T₃ Was Unable to perform useful, this may be due to the low FTU of enzyme that we used.

Table 4 – The effect of use SSM × Phy on Phosphorous digestibility, Bed Moisture and HI test

Treatments	P.DI (%)	B.M (%)	HI (log ²)
SSM			
Control	51.9 ^a	20.9 ^d	4.51 ^a
T ₁	51.4 ^a	22.8 ^c	4.50 ^a
T ₂	49.5 ^b	24.9 ^b	4.50 ^a
T ₃	48.1 ^c	27.1 ^a	4.50 ^a
MSE	0.25	0.14	0.043
Phytase Enzyme (500FTU /Kg)			

E ₀	49.8 ^b	24.30 ^a	4.53 ^a
E ₁	50.6 ^a	23.64 ^b	4.53 ^a
MSE	0.177	0.10	0.031
(SSM ×Phy) Interaction			
Control× E ₀	51 ^{bc}	21.5 ^e	4.53 ^a
Control × E ₁	52.3 ^a	20.4 ^f	4.49 ^a
T ₁ × E ₀	50.7 ^c	23 ^d	4.53 ^a
T ₁ × E ₁	52.1 ^a	22.6 ^d	4.57 ^a
T ₂ × E ₀	49.4 ^d	25.3 ^b	4.51 ^a
T ₂ × E ₁	49.5 ^d	24.6 ^c	4.49 ^a
T ₃ × E ₀	48.1 ^c	27.3 ^a	4.53 ^a
T ₃ × E ₁	48.2 ^c	26.9 ^a	4.48 ^a
MSE	0.35	0.20	0.062

*Means within row with no common on letter are significantly different (p<0.05)

The findings of the present study on serum components (Table 5) indicated that there were significant influenced for serum calcium, and inorganic phosphorus by the dietary treatments. The Ca and P in blood and tibia ash were higher when broilers used SSM and phytase enzyme together. Addition of phytase changed amount of Ca and P in blood and tibia ash significantly (p<0.05).bird fed diet without SSM had the lowest Ca and P levels in their blood. Phytase supplementation had a significant effect on tibia Ca and P level while it had no effect on Ca level in broiler bloods.SSM has extended levels of phosphorus bounded by phytate (Dan. B, 2008; Deyab, D. M et al, 2009).The percentage of broilers tibia crude ash was significantly increased by the addition of dietary phytase. This agrees with the previous studies dealing with broilers. Phytase supplementation to diets increased the content of Ca and P in the tibia compared to diets containing low P. This is a good indication of increased availability of P from phytase mineral complex by the action of phytase (Sebastian.S, 1998; YoungL.G, 1993).Phytate is the form in which large portion of phosphorus is present in plant feed ingredients. This makes it difficult for non ruminants to gain their requirements out of being fed with these ingredients(Zhaoguo.X.FZ.Hua ,2002).Phytase can help in improving the availability of phytate bound phosphorus and reducing phosphorus levels in excreta from intensive livestock operations(Al Harthi et al ,2009; Kies,A.K et al,2001).

Table 5 – The effect of use SSM × Phy on Calcium and Phosphorous (Blood and Tibia ash)

Treatments	Ca Blood	P Blood	Ca Tibia	P Tibia
SSM	Mg/dl	Mg/dl	%	%

Control	10.2 ^a	6.57 ^{d*}	30.5 ^a	11.40 ^b
T ₁	10.3 ^a	7.01 ^c	30.4 ^a	12.35 ^a
T ₂	10.3 ^a	7.24 ^b	30.1 ^b	12.51 ^a
T ₃	10.3 ^a	7.40 ^a	29.7 ^c	12.50 ^a
MSE	0.06	0.02	0.061	0.06
Phytase Enzyme (500FTU /Kg)				
E ₀	10 ^a	6.98 ^b	29.7 ^b	12.05 ^b
E ₁	10.4 ^a	7.13 ^a	31.2 ^a	12.25 ^a
MSE	0.04	0.016	0.043	0.042
(SSM ×Phy) Interaction				
Control× E ₀	10 ^c	6.40 ^g	30.6 ^b	11.11 ^c
Control × E ₁	10.2 ^a	6.75 ^f	31.3 ^a	11.70 ^b
T ₁ × E ₀	10.2 ^a	6.95 ^e	30.2 ^c	12.29 ^a
T ₁ × E ₁	10.4 ^a	7.06 ^d	31.1 ^a	12.41 ^a
T ₂ × E ₀	10.2 ^a	7.18 ^c	30 ^c	12.50 ^a
T ₂ × E ₁	10.3 ^a	7.30 ^b	31.1 ^a	12.43 ^a
T ₃ × E ₀	10 ^c	7.40 ^a	30 ^c	12.23 ^a
T ₃ × E ₁	10.3 ^a	7.41 ^a	30.4 ^b	12.40 ^a
MSE	0.08	0.033	0.086	0.084

*Means within row with no common on letter are significantly different (p<0.05)

Effect of use SSM and Phytase enzyme on some part of broilers organs were investigated. We showed that carcass yield decreased by using SSM and Phytase supplementation had no effect on percentages of all cuts. This result agrees with previous findings of (Al Harthi et al ,2009; Kies,A.K et al,2001; Gordon.R.W,1998; Sebastian.S.,1998) that showed that phytase supplementation significantly increased percentages of most of carcass merits compared to P-deficient diets. By substitution SSM and Phytase percentage the liver weight percentage was increased significantly. The percentage of abdominal fat was decreased when we used SSM and Phytase enzyme the percentage of abdominal fat was at lowest when SSM consumption was at higher content.

Table 6 – The effect of use SSM × Phy on percentage some part of chickens' body

Treatments	Carcass	Liver	Abdominal fat
SSM	%	%	%
Control	71 ^{a*}	1.91 ^d	1.99 ^a

T ₁	69 ^a	2.13 ^c	1.60 ^b
T ₂	67 ^c	2.27 ^b	1.50 ^b
T ₃	65 ^d	2.36 ^a	1.34 ^b
MSE	0.002	0.02	0.12
Phytase Enzyme			
(500FTU/kg)			
E ₀	68 ^a	2.14 ^a	1.62 ^a
E ₁	68 ^a	2.19 ^a	1.59 ^a
MSE	0.001	0.016	0.84
(SSM ×Phy) Interaction			
Control× E ₀	71.5 ^a	1.88 ^e	1.97 ^{ab}
Control × E ₁	71 ^b	1.93 ^e	2.01 ^a
T ₁ × E ₀	70 ^c	2.11 ^d	1.60 ^{bc}
T ₁ × E ₁	69.5 ^d	2.15 ^d	1.60 ^{abc}
T ₂ × E ₀	67.8 ^e	2.23 ^c	1.54 ^c
T ₂ × E ₁	67.5 ^f	2.31 ^b	1.46 ^c
T ₃ × E ₀	65.3 ^h	2.34 ^{ab}	1.38 ^c
T ₃ × E ₁	65.5 ^g	2.39 ^a	1.30 ^c
MSE	0.003	0.033	0.17

*Means within row with no common on letter are significantly different (p<0.05)

As result was relevant (Table 7) small intestine mucosa and sub mucosa diameters were significantly increased when we applied T₁,T₂,T₃ diets for them (p<0.05). Musclaris and serosa parts diameter were higher in T₃ than others. Data from this study showed use of Sesame meal in broilers diets cause increase total diameter of small intestine parts (p<0.05). InYamauchi et al (Yamashita K., et al ,1992; Yamashita K., et al ,1995) Research Epithelial cells proliferations were reduced by reduction in energy and nutrient (Yamashita K., et al ,1992; Yamashita K., et al ,1995 intakes, and fat exerted a strong stimulatory effect for intestinal mucosal regeneration. Most values of the intestinal villus height, epithelial cell area, and crypt cell mitosis numbers were not different among groups for each intestinal Segment. Flat epithelial cells were on the intestinal villus apical surface in the group fed 0% dietary SSM. Considerations for current growth performance and histological intestinal alterations suggest that the SSM would have no detrimental effect on the growth performance with up to 20% dietary SM nor on the intestinal villi with

up to 30% dietary SSM, but hypertrophy was observed in the epithelial cells of bird fed up to 20% dietary SSM (Yamashita K., et al, 1992; Yamashita K., et al, 1995; Yamashita K., et al, 2006).

Table 7 – The effect of use SSM × Phy Small Intestinal Morphology

Treatments	Mucosa , Sub Mucosa	Musclaris	Serosa	Total
SSM	(micron)	(micron)	(micron)	(micron)
Control	111.8 ^{c*}	12.1 ^a	7 ^c	130.9 ^c
T ₁	112.8 ^{cb}	12.1 ^a	7.1 ^{cb}	132 ^c
T ₂	115.5 ^b	12.2 ^a	7.3 ^{ab}	135 ^b
T ₃	120.3 ^a	12.05 ^a	7.4 ^a	139.8 ^a
MSE	0.97	0.034	0.08	0.78
Phytase Enzyme (500FTU/Kg)				
E ₀	115.4 ^a	12.16 ^a	7.3 ^a	134.8 ^a
E ₁ (114.8 ^a	12.07 ^a	7.1 ^a	133.9 ^a
MSE	0.68	0.024	0.055	0.55
(SSM ×Phy) Interaction				
Control× E ₀	112.2 ^{bc}	12.2 ^a	7.5 ^a	131.9 ^c
Control × E ₁	111.9 ^{bc}	12 ^a	6.95 ^d	130.7 ^c
T ₁ × E ₀	112.9 ^{bc}	12.1 ^a	7.2 ^{bc}	132.2 ^c
T ₁ × E ₁	112.6 ^{bc}	12.11 ^a	7 ^{cd}	131.7 ^c
T ₂ × E ₀	115.5 ^b	12.22 ^a	7.4 ^{ab}	135.1 ^b
T ₂ × E ₁	115.5 ^b	12.20 ^a	7.2 ^{bc}	134.9 ^b
T ₃ × E ₀	121 ^a	12.11 ^a	7.5 ^a	140.6 ^a
T ₃ × E ₁	119.6 ^a	12 ^a	7.3 ^{ab}	138.9 ^a
MSE	1.37	0.049	0.11	1.11

*Means within row with no common on letter are significantly different (p<0.05)

Conclusion:

We could be explained by the facts that sesame meal can benefit acts on performance for broilers chicks. This improvement may be due to the biological functions of Sesame meal to improve growth or that may be due to its role as stimulant, carminative, enhanced digestibility, anti-microbial properties and it can be used as a good source of protein in substitution for soybean meal in broiler diets. Results of this study are in agreement with previous findings reported by (Kaneol.K, 2002) and (Yamashita K., et al, 1992; Yamashita K., et al, 1995; Yamashita K., et al, 2006). Results of this study indicate that SSM can be

use at 25% level to replace with SBM in the diet of broilers without adverse effects on the productive performance, blood parameters, carcass components of the birds. Using SSM amounts above 25% in broiler diets can be harmful. Because it has extended amount of phytate which can bound protein and minerals and make them unavailable for broilers. To solve this problem we recommend higher FTU of enzyme for more availability of nutrients .Further tests are needed to explore and more detail explanation.

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NATIONAL OIL COMPANIES & ENERGY MARKET: THE ENERGY MATRIX CHANGE AND ITS IMPLICATIONS

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ABSTRACT

The resurgence of National Oil Companies (NOCs) in the global energy market is raising quite interesting discourse amongst academicians, industry players and even policy makers. They also control quite a handful of oil and gas reserves within the extractive industry of the world's oil and gas reserves. The role and performance rate in the international energy market has a direct link in effecting a change in the entire energy mix which could either contribute to the overall objective of any consuming nations of the world. The objective of this work to itemise based on qualitative data to compare the performance of the NOCs with IOCs and to bring to bear the reasons for their inefficient performance despite the fact that they control a sizeable number of the world's reserve as well as to present the changes in the National Oil Companies and Energy market and its implications of the later on oil companies.

1. INTRODUCTION

National Oil Companies (NOCs) that belong to countries of huge resource deposits may find it quite onerous to create value than their counterparts in countries with small resource deposits. Although the size of the resource endowments matters, the manner in which these resources are extracted matters more because greater resource deposits lead to greater value creation if there are "efficiency during extraction" and revenues derived are used to replace reserves as well as support production levels.³

The energy sector play a very significant role in the gamut of every developed and developing nation.

Their economic advancement and prosperity is hinged on the availability of affordable clean sources of

³Al Obaidan., A.H & G.W Scully , " *Efficiency Difference between Private and State Owned Enterprises in the International Petroleum Industry*", Applied Economics, Vol. 23 237-246, (1991)

energies. Without a proper solid planning these challenges cannot be overcome on theoretical analysis but practical implementation of the policies formulated for the industry. But this height cannot be achieved in vacuum; it needs the collaboration of certain players. This is where the Oil companies owned by national governments (“NOCs”) and oil companies with extensive international operations owned by diverse private investors (“IOCs”) which constitutes some of the massive and most important economic Organization on the planet. This is because either individually or collectively they wield a vast amount of capital and have huge potential impacts on the global macroeconomics conditions and global level environmental policies.⁴

2. NATIONAL OIL COMPANIES (NOCs)

What actually constitutes an NOC and what distinguishes an NOC from an IOC? Is it about owning a state majority in the oil deal? Or is it 100% state ownership? The distinction is anchored on whoever holds 51% or more of the voting shares and influences the way decision is reached on the overall. If the shares are majorly owned by the state, the company must answer to the government or state, therefore, such a company is construed as a NOC.⁵ Conversely if the 51% voting majority is privately held or listed it would be as an IOC. Although the purpose of establishing the NOC in the global energy market is basically to assume responsibility in order to steward oil wealth to tackle the developmental needs of a

⁴J, A. Roberts., Strategic Alliance Between National and International Oil Companies, (Program on Energy and Sustainable Development, Stanford University, Stanford, at <http://www.pesd.stanford.edu.com> (last visited on the 12/01/2013 at p.3

⁵Hartley, PR., Medlock III KB, A Model Of the Operation and Development of a National Oil Company, Rice University, James, A Baker III Institute For Public Policy, (2007), at <http://www.rice.edu/energy/publications/nocs.html>.

²Rob Jessen “ IOC Challenge: Providing Value Beyond Production” Special Report, Oil and Gas Journal, February, 2, 2009

nation and its teeming population in a sustainable manner.⁶

NOCs are a complex phenomenon. As commercial actors they compete not only around their home country between themselves but with major IOCs around the world. They opt for contracts source for finance, equipment's and technology that are intrinsic components of the recent energy scene. NOCs are never monolithic but rather in the area of refining and marketing, they have recorded a significant impact in Asia and in United States. They are weapons of state power and many of them are the epitome of national unity and independence. In the same ramification some host governments view their NOCs as a conduit pipe for the formulation of foreign policy which enhances their international prominence and boost strategic alliance within the comity of nations in the GEM.

Therefore, the economic, commercial and strategic dimensions expose the elements for the growing relevance of NOCs in the industry. Regarding the economy, many industry players are perturbed with the need for NOCs to meet the growing demand of hydrocarbons despite the bloated workforces, political interference and expensive consumer subsidies as features of NOCs.⁷ This shows the relevance of NOCs in the global energy market and the role they play in addressing the matrix change in the oil and gas sector. Without prejudice to the policies formulated by policy makers within the industry. It is therefore imperative to note that except NOCs increase their efficiency,⁸ the global energy market would be heading toward a rocky future. However, to ensure efficiency, one option is to encourage partial

⁷Keynote: The Honourable James Baker Institute III (2) Institute for Public Policy BIPP Event Monday, March 2007 at <http://www.Bakerinstitute.org> (last visited at 12/12/2012)

⁸P. Hartley., et al., "Empirical Evidence of Operational Efficiency of National Oil Companies," in *The Changing Role of National Oil Companies in the International Energy Markets*, March 27 at <http://www.rice.edu/energy/publication/noc.html> (last visited On 20/12/2012)

privatization. Beside that improved governance, institution of good business practices and greater transparency can improve the effectiveness of NOCs to curb the implications that bedevil the global energy market.⁹

In order to address the strategic challenges militating against the NOCs, cooperation is key because if the consuming countries are confident that their energy security is guaranteed the IEM, the less likely would they be inclined to hedge their bets by using their NOCs to build up alliances with unsavoury regimes. Likewise would producing countries use their energy resources as a means of coercion against neighbour states if they are confident that their access to market their products for the purpose of benefiting its citizens.¹⁰

3. RISE OF NATIONAL OIL COMPANIES AND GLOBAL ENERGY MARKETS

As s major producing countries are seeing their energy reserves decline rapidly as domestic demand appreciates as a result of the high returns sort by the IOCs operating within their countries call for an urgent resurgence of its NOCs with a bid to minimize cost of production and gain absolute control of the energy base of the nation.¹¹ This calls for SOCs to invest abroad to ensure their long term survival and to build strategic energy supplies. The national oil and gas companies as the major producing countries of the world have developed technical and commercial advantage to compete abroad with their international counterparts.

⁹Ibid
¹⁰Ibid
¹¹Ibid

3.1 Factors Responsible for Transformation of the NOC

During the late 1980s, host governments and NOCs found themselves in huge debts, increasing growth in demand for energy resources, tight exploration and production accounting, drastic depreciation in the production of energy resources at the domestic as well as the international level.¹² As government enterprises began to be perceived as bloated, not effective enough to translate the huge capital investments into increasing facilities for the industry as well as increasing revenues for the host governments in their operations, disenchantment regarding state ownership grew. In the same vein the global, social, political and economic environment was revamping again: the withering of socialism, the exits of the ideological conflicts between capitalism and communism, the expansion of the economy as a result of globalization, a long lasting decade of stagnation of oil prices all results in the transformation of the global energy market but the activities of the NOCs in value creation objectives and role, a clarion call for foreign direct investments and a massive competition for oil and gas investment.¹³

Energy industry liberalization and privatization became a trend all over the world. And this has caused all industry participants to place greater reliance on market forces and insignificant dependence on government in the distribution of resources (for the sake of uniformity any system that encourages a shift from public ownership of resource exploration and distribution to a private ownership style is generally construed as liberalized).¹⁴ All these factors have culminated into transforming the NOCs in the area of their strategies for the achievement of national mission in their activities and to boost foreign participation

¹²King & Spalding LLP., *An Introduction To Upstream Government Petroleum Contracts: Their Evolution and Current Use*, Vol.3, 2005 at <http://www.gasandoil.com/ogel/> (last visited 17/12/2012)

¹³Ibid at p.7

¹⁴Boubakri, N & J.C. Cosset, and O. Guedhami, "*Liberalization , Corporate Governance and the Performance of Privatized Firms in Developing Countries*" *Journal of Corporate Finance* 11:767-90 (2005).

in the exploration and production of hydrocarbons.

Due to the factors which led to the transformation of the NOC mentioned above, what has emerged is the level playing ground for competitive market investment of risk capital and modern technology in which host governments for the limited funds available for investments. Host governments through their NOCs often embark on some economic, political and legislative including fiscal, trade, monetary, commercial and industrial reforms in order to compete favourably with its competitors. These reforms are meant to meet the expectations of the Contractors and the risk capital markets relating to the host governments treatments, protection and regulation of the investments and its managements and distribution and wealth created from the said investment.

3.2 Strategies, Objectives and Performance of National Oil Companies

Approximately 77% of reserves in the energy sector are under the management the NOCs with no equity participation from the IOCs. This record is based on the 1, 148 world proven reserves. IOCs from the west now control less than 10% of the world's resources base in the global energy market.¹⁵ NOCs currently dominate the world current oil production rate. This is true because if one look at the top 20 energy producing companies, 14 are apparently NOCs. However, the NOCs still experience less return on capital than the IOCs in similar size and operations. Based on the low return on capital, many NOCs are set to reevaluate their business strategies with, adequate implications to the IEM.

¹⁵General Manager, Global Energy Markets US, Economics, BP, 1101 New York Avenue, NW, Suite 700, Washington, DC, 2005

As part of their strategies so many NOCs have begun to clamour for strategic resources in the Middle East, Eurasia Africa to meet up the increasing demand of energy resources within the global energy market with a view to increase its return on capital. In some cases they edge the major IOCs in major crucial resource development in the industry by establishing close and interlocking relationship with their national governments with geopolitical and strategic objectives factored into foreign investments instead of being commercial in all respect in its operations.¹⁶ And as such these NOCs compete for major capital budgets which would be channelled toward the development and replacement of reserves and production activities.

Thus, the relevance of the first limb of this section is key to understanding the changing strategies, behaviours and the impacts of NOCs in the energy market in order to appreciate the future supply, security and pricing of oil. Therefore, the goals, strategies and behaviours of the NOCs have changed from being solely commercial in their operations to a realm of actual participation in the exploration and production of energy resources locally and abroad in major world reserves. Understanding this strategic transformation is necessary to appreciate the future organization and operations of the international energy market.

Now regarding the objectives of NOCs, since NOCs are solely and majorly owned by their domestic governments; that is why in order to achieve the value of the company, it must therefore be considered alongside other delegated objectives by the domestic government. Although all NOCs responds to their

¹⁶N.M, Victor.,” On Measuring the Performance of National Oil Companies” Working Paper 64, Program and Sustainable Development, Stanford University, Stanford, 2007.p. 2

various governments objective in one respect but their level of influence is what differs. Most developed nations NOCs toe the part of a more commercially oriented strategy. The Statoil in Norway and petronas in Malaysia on a more commercially driven part unlike the Nigeria National petroleum Corporation (NNPC) and Petroleos de Venezuela, where government objectives takes precedence over the commercial objective of the companies. These specific objectives are discussed in detail below:

Wealth Distribution

NOCS in the world all over are engaged in wealth distribution of the resources derived from the sale of the hydrocarbons exported to consuming nations. The redistribution of the wealth realized may be achieved through the provision of fuel subsidy schemes, social welfare programmes and employment policies. Although subsidized fuel price creates an atmosphere for low price on energy prices, insulates the domestic economy from the damaging impacts of world energy prices, enhances transportation and industrial resources. These subsidy schemes have a downside effect of creating artificial demand growth and it puts some more expenses on the balance sheets of the government, inefficient use of fuels, arbitrage based smuggling and corruption within the regulatory bodies responsible for the redistribution of these subsidy monies. Fuel subsidies are prevalent, bringing down the price of gasoline in Venezuela to \$0.11 per gallon, Iran \$0.21 and Saudi Arabia to \$0.64.¹⁷ In the same vein the strong use of subsidies leads to a tightening of supply at the global energy market resulting to a higher energy prices in the energy importing nations.

Economic Development

¹⁷J.,A Meyers., The Changing Role of the National Oil Companies in the International Energy Markets: *Introduction and Summary Conclusions*, Baker III Institute of Public Policy, Rice University, March 1, 2007, p. 6

For a particular domestic government to achieve economic prosperity and development, the NOCs are a vertical tool for this lofty object of the national government. The energy sector is the first largest economic sector that is opened to the world economy in some nations. And as such concepts such as international investments and property law as well as accounting and financial standards were the first to be introduced in the sector.¹⁸ All these concepts accounts for the achievements of the economic development. Technologies are transferred to the larger economy through the industry. In order to achieve sustainable economic development, NOCs could be asked to supply subsidized fuels for various industries whose activities are contributory to the nation's economic development. Therefore, as part of achieving economic development, it might impose local content rule as part of the NOCs objectives to foster the development of ancillary services into the domestic economy. KMG of Kazakhstan is a clear example where its NOC is saddled with the responsibility of integrating the economy into the world's economy and ensuring that Kazakhstan's growth and development is transformed into a broad spectrum of economic growth in the nation.¹⁹

Foreign Policy

Again because oil and gas is a strategic commodity the production and distribution can lead to strategic relations amongst nations of the world. It could however be used as a weapon, which is generally known in international relations as '*oil as a weapon*'. Therefore, it is without doubt that NOCs can also be used by their national governments to promote the foreign policy goals and objectives of the nation by

¹⁸Olcott, Martha Brill, Kazmunaigaz, Kazakhstan's National Oil and Gas Company: presentation at the James A. Baker III Institute of Public Policy, Rice University, March 1, 2007, p.3

¹⁹Ibid

establishing strategic alliances between consuming nations and supply nations of these energy resources.

And it could also establish a strong tie between two NOCs of different countries. By way of illustration, Saudi Aramco's conclusion to hike oil output in the beginning of the Iraqi invasion of Kuwait and China's oil based relationship with Venezuela, Iran and Russia is partially construed as politically inspired.

A more striking example of how NOCs are being linked to achieve the geopolitical aims and objectives of their domestic governments is PDVSA and President Chavez and his Bolivarian revolution.²⁰ In order to counter US expansionism threat against his regime he used economic aids, favourable oil pricing and joint energy project in the Caribbean and Latin America and other areas to discourage the promotion of democracy and global markets which are threats to his revolution.²¹ This is where the PDVSA was very instrumental in actualizing these policies. Iran too in the pursuit of its nuclear weapon used oil cut offs to the West as a possible threat signal as well as Russia interrupting natural gas supplies to Europe as a result of conflicts it had with former Soviet Union members over transport fees and supply price.²²

Energy Security

Energy security means different things to both consumer and the supplier of energy resources in the value chain. Security from the demand point of view means the ability of the supplier to diversify his supply chain such that no particular consumer is indispensable. Just like the action of PDVSA to direct its energy supply away from the US to reduce the economic influence US would have over its nation and as way of

²⁰CSR Report RL 32488 Venezuela: Political Conditions and US. Policy, by Mark P. Sullivan and Nelson Olhero: IN: J.,A Meyers., *The Changing Role of the National Oil Companies in the International Energy Markets: Introduction and Summary Conclusions*, Baker III Institute of Public Policy, Rice University, March 1, 2007, p. 6

²¹Mares, David R., and Nelson, Altamirano, *Venezuela's PDVSA and World Energy Markets: Corporate Strategies and Political Factors Determining Its Behaviours and Influence*. Presentation by the James Baker III Institute for Public Policy, Rice University, March 1, 2007,p.62

²²Ibid

exploring other markets for the Venezuelan crude. However, technological factors in some cases make the actualization of these strategic objectives onerous.

From the supply angle, security of supply means the ability of the NOC to diversify its supply lanes by having an absolute discretion to choose who to supply to and when to supply. In fact the NOCs have exclusive right to supplies of energy resources of which China falls under this strategy. The fore, the NOCs are a conduit to achieve the energy security objective of the national government from both supply and demand side economically speaking by diversifying its supplies lanes as well as controlling the level of demand and the quantity of resources that would be supplied to existing and prospective consumers.

Vertical Integration

In the downstream energy industry of the world, vertical integration is a term used by industry players to encourage competitiveness within the industry with a view to reduce the prices of energy products along the value chain. Here one company is allowed to own a generation value chain as well as the supply network. So other words, a NOCS are tools to encourage the vertical integration²³ of the production stage as well as the refining and the retail aspect of the value chain in the GEM. The advantages are that it helps the national government to maximize the value added from producing and selling energy products. It also promotes diversification and reducing risk by owning the production and refining aspect of the business of exploration and exploitation of these energy products. PDVSA acquisition of the refining and retail company in the US (Citgo) is a novel example of how demand security can be enhanced and making the NOCs to be profitable in the market during fluctuations in oil prices.

²³In the oil Industry, vertically integrated firms operate both at the upstream and the downstream markets.

On the issue of the performance of the NOC in the discharge of its objectives and fulfilment of the national mission of the government. Their performance is key because its implications affects the supply of oil and gas resources in the international energy market on the premise that they oversee a large junk of the world's oil and gas reserves. Due to a poor performance level or a government-dictated policy intervention measures that are quite distinct from those of the profit maximizing outfits, NOCs in terms of resource extraction is lower than that of the IOCs. This is not to say that some NOCs do not performing within the level of the major. But in all their performance level is far from monolithic and as such oil and gas reserves in the hands of NOCs are considered effectively “*dead*.” Hence there are some conclusions that are responsible for the poor performance of a NOC. Which are as follows:

NOCs and their governments and not IOCs and its shareholders control most the development of oil and gas resources at the upstream level. This accounts for the strong interference of the domestic government in the areas of investment and operational decisions of the NOCs which invariably makes the NOCs to be less efficient. Secondly market capitalization is another issue that affects the NOCs performance. Though it is an imperfect indicator for measuring performance.²⁴ Thirdly the corporate governance and transparency also affect the performance of a NOCs. This affects the inability of the NOCs to deliver the sustainable objectives due to its multiple and conflicting objectives, excessive political interference and opacity. In addition the ownership and control of the NOCs method affects their performance.

According to an analysis if NOCs would be converted to private enterprise, profit oriented entities, and then less resource input would be used to achieve large demand concerns within the operational

²⁴ Ibid

performance.²⁵ Having discussed the factors that militate against a NOCs performance rate in its operations, it is therefore pertinent to suggest some palliative measures to address some of these challenges that confront their performance. Privatization is one option, improved governance, greater transparency; the institution of good business practices can go a long way in increasing the effectiveness of a NOC.

4. ENERGY MATRIX CHANGE AND ITS IMPLICATIONS ON ENERGY SECURITY IN THE GLOBAL ENERGY MARKET

It is true that the demand for energy resources has been on the increasing scale over the past centuries of which developing countries are seen to be the main drivers for the said increase in the global energy market. Although the world energy mix is dominated by fossil fuels which are not sustainable in themselves. What this state of affairs brings to mind is the possibility of introducing and revamping the current energy matrix into a more sustainable and renewable sources of energy. Fossil fuels- including coal, crude oil and natural gas for many years has been the primary commercially sourced energies for industrial production, transportation and heating purposes.

Generally hydrocarbons, in particular petroleum's have had several need ranging from the pharmaceutical, construction, and clothing to the agricultural sectors of every producing country. Although the incorporation of other sources of energy like nuclear and renewable sources has been quite few due to the under developed technologies and the high cost associated with such energy sources in the energy matrix. Hence the identification of certain factors surrounding the consumption of fossil fuels right from

²⁵A.A Alchian., and H, Demsetz., Production, Information's Cost and Economic Organization. America Economic Review 62 , 1972 (5): 777-95

time immemorial has called for a change in the energy matrix in the global energy market. Whereas some of these factors borders on the environmental damage caused by the huge dependence on fossil fuels, the supply shocks experienced during the 1973 oil crisis and the 2008 oil supply shock that greeted the oil sector which spiked up the cost of a barrel oil to \$150.²⁶ All these put together, has raised policy makers within developed and developing nations to look for a more sustainable strategies to bring about a change in the energy matrix of the global energy markets.

It is upon this background that these sections seek to identify the state and the prospect of the future energy matrix and its implication to the global energy market. It also brings to bare the drivers behind the change in the energy matrix.

4.1 Drivers Of The Future Energy Change And The Challenges Therein.

A wide range of factors are responsible for the evolution of the change in the energy mix at both domestic and international levels within the extractive industry. These are generally hinged on the availability of resources, environmental benefits (and cost), production cost for fossil fuels, energy security concerns and technological constraints on producing nations since the exploration and exploitation of fossil fuels require a high level of up to date technologies to tackle the scientifically uncertain changes in the industry. The role and contribution non-renewable resources play in the energy matrix is dependent partly on how soon known reserves are depleted or the cost of extraction. Although experts believe production has peaked in some regions and has begun to decline. British Petroleum (BP) estimates that current rate of

²⁶United Nations Conference on Trade and Development, The Future Energy Matrix and Renewable Energy: Implications for Energy and Food Security Second Session- Geneva 24-25 March 2010.

production, oil reserves in less than 50 years would deplete, in 60 years natural gas would be exhausted and in 122 years Coal would deplete. Despite new discoveries has begun, it does not do away with the rising cost of production which is orchestrated by the increase in demand and the technological difficulties present in the global energy market.

Global Hydrocarbon Reserves and Production, 2008

	Reserves	Production
R/Y (years)		
Oil	195.3×10^9 tons	3.928×10^9 tons
		49.7
Natural Gas	185.0×10^{12} m ³	3.066×10^{12} m ³
		60.3
Coal	826.0×10^{12} tons	6.770×10^9 tons
		122.0

Source: BP Statistic Review of World Energy, June 2009

Accordingly the development of other sources of fuels is another factor responsible for the change in the energy mix in the global energy market. However, this is as a result of the rising cost of fossil fuels. For

example in power generation, nuclear fuel usage has been observed to be the alternative to generate electricity for the consumers at an affordable price.²⁷ Hydro energy is certainly the best alternative from a cost minimization point of view when considering the hassles associated with the disposal of nuclear waste. This is not to say that hydro energy generation system is free from limitations.

In addition the change in the energy matrix from fossil fuels to more sustainable renewable sources is attributable to certain environmental implications resulting from the combustion of fossil fuels. The bid to reduce the level of greenhouse gases produced as a result of the emission of carbon dioxide to a natural range of between 180 and 300 parts per million (ppm) as compared to its current levels over 400 ppm.²⁸

Again the improving national and energy security by digressing to greater dependence on local power sources has necessitated the immense rise of renewables into the global energy matrix. Approximately 80% of the world's oil reserves and more than 40% of global oil production are controlled by twelve countries.²⁹ Thus, this singular factor is possible to create adverse effects in the event of supply shocks which invariably accounts for a change in the energy matrix in the world market. The high point for this change in the matrix is to diversify other domestic fuels, in order to mitigate the cost at the pumps and to reduce the carbon dioxide emission level that emanate from the use of fossil fuels.

The rapid introduction of newer technologies such as carbon capture and sequestration³⁰ to tackle the damage caused by the use of fossil fuels within the global energy mix has a role to play in the adding to

²⁷The Economist of Nuclear Power at <http://www.World-nuclear.org/inf0/inf02.html> (lasted visited at 28/01/2013)

²⁸ibid

²⁹<http://www.opec.org/home/PowerPoint/Reserves/OPECShareWorldcrude.htm>. (last visited on the 31/01/2013)

³⁰A term used to describe the capturing of CO₂ from source point from power plants and other industrial facilities, compress it, transport it mainly by pipelines to suitable locations and inject it into deep subsurface geological formations for indefinite isolation from the atmosphere.

the climate change objectives. If this new technologies ranging from solar power, wind power to the use of hydrogen would invariably lower the cost of production of these renewable energy types. This automatically causes a change in the energy mix from fossil fuel use to a more sustainable energy type in the global energy mix. Estimates has it that from per unit of electricity generated from renewable energy industry, more jobs are created than from fossil fuels; the agricultural and the production sectors are not exempted from the benefits that are derived from the subsequent changes in the energy mix.³¹

4.2 Implications of the Change In The Energy Matrix On Energy Security In The Global Energy Market

The change recorded in the global energy mix in the international market has a lot of implications to importers, IOCs and investment in the industry. It is upon this backdrop that this section shall examine the various implications as it affects the global energy security issues of both producing and consuming nations of the world. The role of NOCS in the energy mix within the global market appears to grow in importance; NOCs of consuming countries offering access to rapidly growing reserves seem likely to increase in their influence given the preponderance of proved reserves under their control.³² Based on this investment prospects appears challenging, due to the mix of modest growth in global consumption- and declining consumption in matured OECD markets.³³

Because of the environmental implications the consumption of fossil fuels has on the global ecological market and the steady increase in the cost of production, alternative sustainable sources of energy has

³¹D, Kammen et al., Putting Renewable to Work: How Many Jobs Can The Clean Energy Industry Generate? (2004) at http://www.unep.org/civil_society/GCSF9/pdfs/karmen-energy-jobs.pdf (last visited on the 31/01/2013)

³²CEE-UT (Centre for Energy Economics- University of Texas) “ Commercial Framework for National Oil Companies” Bureau for Economic Geology, Jackson School of Geoscience, University of Texas at Austin

³³U.S Energy Information Administration (2010). Annual Energy Review

been explored which appears to be cheaper as a result of their availability. This in the mind of this work potends an implication that there would be a shift in the dependence of fossil fuels to more renewable energy sources thereby causing the rate of CO₂ emissions level to drop drastically. In the same vein since there are diversifications within the value chain, the issue of producing nation's ability to influence the policies of consuming nation is addressed. Therefore, the implication of the energy change to the international energy markets creates a reduction in the investment prospects³⁴ and the investments which were concluded prior to the change in the matrix would become no longer viable since the discovery and the shift to renewables would force the final prices of fossil fuel to depreciate.

The formulation of effective energy security policy of a nation is hinged on an understanding of the energy independence of that nation. To attain "energy independence" a state must be at the level where its economic, military and foreign policies is never under the directing wheel of an energy producers. Although this definition captures the essential ideas but a measurable definition is the one that reflects the uncertainty about the future energy market conditions.³⁵ Therefore, to achieve energy independence certain measures such as fuel substitution, a diversification in the uses of fuels and fuel transformation that can meet demand growth even when conventional supplies seem to be affected, and increase efficiency. The implication of this is that the prices of fossil fuels would drop drastically as a result of the change in the energy matrix in the global energy market and energy security would be sustained since

^{34,34}J, A. Roberts., Strategic Alliance Between National and International Oil Companies, (Program on Energy and Sustainable Development, Stanford University, Stanford, at <http://www.pesd.stanford.edu.com> (last visited on the 12/01/2013 at p.3

^{35,35}For example, "the annual economic oil dependence will be less than 1 percent of United States GDP, within 95 percent probability, 2030." Source Greene DL and Leiby PN (2007) Oil Dependence: Realistic goal or empty slogan? Oak Ridge National Laboratory, March.

alternative sources of energies have been brought on board to compete with the conventional energy sources in the market.³⁶

In addition due to the volatility in the prices of fossil fuels this has resulted in a change in the GEM. As a result, the security of demand and security of supply would be threatened in the entire energy mix. Maintaining security of demand is a crucial indices for facilitating supply of energy. In order to address the issues linked to the security of supply and security of demand as a means of attaining energy security, the appropriate method of measuring it, is to ascertain whether the supplies are easily accessible, available, affordable and even acceptable by the final consumers.

To conclude the change in the energy matrix in the global energy market that has diverse implication to the IOCs, importers, and the final consumers. To the IOCs it would certainly create a situation whereby project financiers would no longer find it lucrative to lend money for the execution of projects since there are a variety of energy resources which are cheap and affordable in all ramifications than the fossil fuel which ordinary pose a serious threat to the ecological system. It also has a consequence/implication of creating huge unemployment rate within the extractive industry. Workers in the oil and gas sector would be relieved of their jobs since the production level would reduce as a result of the introduction of renewables in the energy mix which creates a competitive market such that consumers of fossil fuels would shift to other sources of energies. Another implication that this work tends to bring to the reader is that the cost of production of commodities will increase. This is because when there is a shift from fossil fuels which are regarded as cheap and affordable to renewable which are regarded as environmentally

³⁶See supra note 4 at 24

friendly however expensive it maybe, it would definitely increase the cost of commodities that were produced from renewable energy source.

4.3 Policy Intervention To Address The Challenges and the Drivers of Change in the Energy Matrix

Having discussed the drivers of change in the energy matrix in the global energy market which creates the implications for the entire market. It is therefore necessary to explore certain policy options in which the players and stake holders need to adopt to cushion the negative effects of energy security challenge in the global energy market. Prior to this time major IOCs produce their fields at maximum production, it is not out of place to ask whether these majors are sufficiently reinvesting their cash flow with a bid to find reserves and accelerate production. This question imperative because it is crystal clear from facts before us the majors are not replacing reserves fully and therefore their long term asset base is slowly liquidating.³⁷

One germane option in order to address the implications created as a result of the energy matrix change is for the IOCs and NOCs to collaborate to cease the opportunity in the present times of high energy prices and huge profit turn over by devoting a large share of their soaring profits and cash flow to exploration of new fields. If this policy option is followed it would go a long way address the energy security at the international energy market. This is true if one go back to memory between the 1970s and 1980s when strong IOC spending spurred a large increase in non OPEC production, promoting diversity of supply and

³⁷Boubakri, N & J.C. Cosset, "The Financial and Operating Performance of Newly Privatized Firms: Evidence from Developing Countries, Journal of Finance 53(6) 1081-110 (1998)

enhancing U.S energy security for two decades. Now unfortunately these legacy assets are heading for geological and natural decline, thereby raising the question about what new resources will be available to replace them.³⁸

Secondly, the wave of consolidation of the largest traded oil firms that took place in the 1990s should be discouraged as a policy decision to address the inefficiency trend in firms operating within the energy market. This is advised because if large oil exploring and exploiting companies merge for the purpose of maximizing production. When such consolidations of firms are encouraged it could lead to a situation where firms becomes too large to exploit effectively he kind of reserves presently available for private capital. One explanation for this trend is that companies would become opportunity constrained due to change in political climate in major energy producing countries.³⁹

5. CONCLUSION

The global energy market is a completely interesting phenomenon in the contribution of energy resource nations the world. The world solely depends on certain sources of energy for the development of some strategic sectors in any given nation. But due to factors which are sometimes unforeseen, it is very difficult to interpret how this phenomenon dwindles to cause a change in the entire energy market. However, this work has carefully brought to bear the dynamics involved in the changes and some of the reasons for such change in the energy mix. In the same ramification, how the resultant implications of the

³⁸Gately, "What Oil Export Levels Should WE Expect from OPEC?" (2007):151-173; Gately, OPEC's Incentives for Faster Output Growth," (2004):75 -96.

³⁹"Genealogy of Major U.S Oil and Gas Producers," 1/18/2007. Energy Information Administration. www.eia.gov [Product#: upstream.pdf] <http://www.eia.doe.gov/emeu/finance/mergers/upstream.pdf> last visited on 24/02/2013

change in the energy matrix has really impacted on importers and consumers, as well as IOCs in the value chain.

NOCs is monolithic in its operations despite the fact that it has greater access to reserves but yet cannot translate such opportunities to meet global demand of energy resources. Whereas the IOCs are a completely different entities which are out to make profit for themselves and for the company in general and as such are profit oriented and nothing more.

The crux of the matter is that the energy market at both domestic and international markets needs palliatives to address the energy security challenges in the world. To achieve this, this work also agreed with some of the postulations of some writers and commentators which had been discussed here in this work to say that the introduction of other sources of energy is a step in the right direction. This is because the fossil fuels in themselves are not environmentally friendly and the cost of production is very capital intensive and above all the availability is what is really raising the big worries since virtually all nations of the world depend on energy resources for industrial purposes.

In view of the foregoing, for there to be a level of energy security at the global energy market, governments of producing countries should be flexible toward the activities of its national oil companies so as to allow them operate as a profit oriented entity with total control but a little supervision would do the magic to increase their efficient level which invariably contribute to security at the supply chain. NOCs should not exist primarily to achieve the national objectives of the owning government but rather it should operate more effectively by competing with its counterparts so that the revenues generated could be

divested to developing the various sectors of the economy. And for the fact that they embody a broad spectrum of efficiency, profitability and governance there is every need to actually balance the economic and social benefits which ought to accrue to the nation with its commercial imperatives if it wants to attain the security on both supply and demand side of the value chain. In the same vein this work has demonstrated that assessing the emerging policies and priorities is critical to appreciating the future of the global energy market. Therefore, their position in the scheme of events ought to be monitored for the purpose of effective production and exploitation of energy resources.

Policies that should encourage diversification of supply are a step in the right direction, policies which encourage investments at both the downstream energy sector and the upstream. This is to make the market more liberalized which creates a level of competition amongst the IOCs and the NOCs thereby creating an efficient production and optimum demand need within the energy industry.

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The new financial crises affect human resources management policies in organizational functions.

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Abstract

In this paper we take a step towards developing the theory of crisis influence in organizations and crisis management's role in this. The concept of an organization is a group of people (employees, managers, stakeholders etc.) who form a business together in order to achieve a particular aim. When crisis build up within organization, its structure must change in order to overcome the negative and damaging consequences. The present study shows that crises result from the combination of two parallel cumulative processes: first, an undercurrent accumulation of organizational imperfections that lay a favourable ground for crises to occur and second, the development of a growing ignorance that keeps managers blind to the presence of these imperfections. (Roux-Dufort, 2009) Dealing with such situations demands taking effective decisions and following efficient policies. New managerial policies must be adapted which will lead the company to the effective use of its resources. Moreover we show how human resources management policies as one of the most important and evolutionary managerial skills, could be a way out of the economic crisis period. This fact is supported through bibliographical sources and data analysis reserved from empirical study to the private economic sector.

Keywords: financial crisis, crisis management, human resources management, effectiveness.

Introduction

The world of crises and disasters is shifting. They have different causes, play out differently, draw different reactions, and effect societies in different ways. The contributors assess the changing nature of crises and disasters, explore existing and emerging challenges, and formulate research questions that demand our attention. (Boin, 2009)

The credibility and reputation of organizations is heavily influenced by the perception of their responses during crisis situations. The organization and communication involved in responding to a crisis in a timely fashion makes for a challenge in businesses. There must be open and consistent communication throughout the hierarchy to contribute to a successful crisis communication process.

In this paper we take the opportunity to discuss over the three types of crises managements and how crises build up within organizations. On this aspect we use to outline the crises theory and the four signs of imperfections based on which crises develop. Than, an analysis of the successful decision making polices that deal with crises will follow.

In order to apply theory in practice we will formulate a questionnaire by the use of which we will try to show the importance that an effective human resources management policy could have in the present economic crisis period.

Later on this paper we will display the questionnaire results.

Finally, will arise the opportunity to analyze the crises communication plan and the benefits of establishing a strong HRM system.

The Context of Crisis

Crisis is an unstable time for an organization, with a distinct possibility for an undesirable outcome. This undesirable outcome could interfere with the normal operations of the organization, it could damage the bottom line, it could jeopardize the positive public image, or it could cause close media or government scrutiny. In addition examples of crisis can include when an organization experiences a product failure, a product safety issue, an

incident that result in a poor image or negative reputation, an international incident that negatively affects the organization, and a financial problem-especially a fuzzy accounting problem.(Devlin, 2006) We speak of a crisis when the functioning of multiple, life-sustaining systems, functions, or infrastructures is acutely threatened and the causes of failure or courses of redress remain unclear. This definition builds on the traditional notion of crisis with its core conceptual elements of threat, urgency, and uncertainty(Rosenthal, Boin, & Comfort, 2001 as cited in Boin, 2009) Among all this definitions, Shrivastava, Mitroff, Miller, and Migiani see crises as a combination of several loosely coupled and interdependent events, each one preparing the ground for the other to occur in a chain reaction.(Roux - Dufort, 2009) Traditionally they have been defined as the worst point on an organization, a threat to the basic values that simultaneously creates a sense of urgency and uncertainty among policy makers.(Stein, 2008) .

Crisis management

Crisis management is the process by which an organization deals with a major unpredictable event that threatens to harm the organization, its stakeholders, or the general public. (Wikipedia, the free encyclopedia) Crisis management is a critical organizational function. Failure can result in serious harm to stakeholders, losses for the organization, or end its very existence. According to various crisis management experts, the term crisis management could be defined as special measures taken to solve problems caused by a crisis. (Devlin, 2006) Due to crisis management practices organizations (businesses) are able to forecast and identify the upcoming uncertain situations. It also helps them to identify the nature and causes of the crisis which helps the management to take steps in advance to handle any type of crisis.

At this point we might define what a business consists. Asked what a business is, the typical businessman or

economist is likely to answer, 'An organization to make a profit', which is actually irrelevant. Profit is not the explanation, cause, or rationale of business decisions, but the test of their validity. The first test of any business is not the maximization of profit but the achievement of sufficient profit to cover the risks of economic activity and thus to avoid loss. Its purpose must lie outside of the business itself. In fact, it must lie in society, in how to create customer. It is the customer alone whose willingness to pay for a good or for a service converts economic resources into wealth, things into goods. Customers are the foundation of a business and keep it in existence. (Drucker, 2001 pg 55-58)

In any business there are three common types of crisis:

Financial crisis

Financial crisis means a certain situation in which the organization faces a shortage of finances. Such crisis occurs when the organizations do not forecast the future financial needs or are unable to pay off their liabilities. Financial crisis are considered the worst because they cause an organization to get bankrupt or get liquidated. They can only be handled by affective financial planning, increases cash flow and keeping an over view of the economy and financial market.

Public relations crisis

Public relation crisis general occur when something negative happens against your business or the whole sector to which your business is related. Any factor that causes the image of the business or product to go negative for the

public will be bad for the success of the organization.(King,2010) Empirical research has suggested that public relations and marketing increase organizational effectiveness by building trust and relational commitment with strategic constituencies.(Dozer, L. A. Grunig, & L. E. Grunig, 1995; J. E. Gruning, 2000; J. E. Gruning & Huang, 2000; Hon, 1997, 1998; Huang, 2001a, 2001b; Ledingham & Bruning, 2000; Ledingham, Bruning & Wilson, 1999; Morgan& Hunt, 1994; Wilson, 2000 as cited in Huang, 2008) Crisis events, however, have become part of “a larger, ongoing relationships,” and can damage a quality relationship (Coombs & Holladay, 2001, p. 324 as cited in Huang, 2008), as well as cause severe financial and reputation setbacks.(Mitroff, Pauchant, & Shrivastava, 1998 as cited in Huang, 2008) That is why every business now is worried about its reputation among the people because it has been proved that public relation crisis lead the business toward other crisis like financial crisis.

Strategic crisis

Strategic crisis occurs when certain modes of doing business change or something new comes up on the scene. Old strategies are needed to be replaced by the new ones. Those who fail to adopt the new strategies have to face failure in the business. (King, 2010)

How crisis build up within organizations?

Studying organizational proneness to crises consists of exploring whether specific pre-existing organizational conditions can predict the occurrence of crises. According to Pauchant and Mitroff crisis view as the

potential result of vulnerabilities at different levels of the organization. As such they extend the initial work of Perrow by exploring other facts of the organization strategy, the organizational structure, the organizational culture and assumptions as well as the psychology of managers and leaders.

Crisis proneness should therefore be explored through the lens of a theory that views crisis as a process of gradual accumulation of weaknesses and vulnerabilities, followed by the convergent notion of ignorance, which is precisely how the gradual process remains unnoticed until the eruption of the acute phase of the crisis. This leads us to designing the outlines of a crisis theory:

1-That conceptualizes it as a series of intermediate stages describing the transition from a situation of normality to one of imbalance and then to a disruption;

2-That reflects the ignorance that precedes the eruption of an event;

3-That views the triggering event as the intersection point between these two convergent forces and as a concentrate of the preliminary imbalances and ignorance that the organization found itself in before the eruption of the crisis. (Roux-Dufort, 2009)

According to Roux-Dufort (2007) the development of this theory corresponds to four varying degrees of imperfection: anomalies, vulnerabilities, disruptions and finally crises. These four degrees should be seen as four

signs of imperfection as they gradually accumulate.

The anomalies are the first degree of imperfection. They may take the form of negligence, mistakes, incidents or any event linked to the normal development of organizations. They are simply the result of the tension between the natural variance in organizational and human behaviour that cannot be planned for and the priority to maintain a high level of regularity within the organization (Reason, Parker, & Lawton, 1998 as cited in Roux-Dufort, 2009)

The vulnerabilities represent the second stage in the development of organizational imperfections. They are produced by an accumulation and a combination of anomalies that are either uncontrolled or badly managed. Vulnerabilities are reflected in precursors, forerunners or latent failures (Reason, 1990) that predict the possible through the unexpected arrival of a disruption.

The disruption occurs when vulnerabilities have reached the saturation point that takes them out of manager control. Disruptions are ultimate failures and should therefore be considered as catalysts of crises. They can take the form of unexpected events originating from internal or external sources and that can suddenly transform pre-existing organizational vulnerabilities into a crisis.

Crisis represent the final stage of imperfections. While the disruption is a catalyst, the crisis it triggers reveals a whole series of internal latent failures largely responsible for the appearance of the crisis itself.(Smith, 1992) In a crisis, internal vulnerabilities are made plainly visible to external stakeholders, often to such a point that the legitimacy of the organization is put in danger insofar as its ability to guarantee a minimum level of forecasting is overtaken by the updating of counterproductive and potentially dangerous results that the organization itself has allowed to produce.

Crisis proneness: an accumulation of managerial ignorance

Managerial ignorance is not ignorance in the true sense of the word but rather a form of knowledge based on erroneous assumptions shared by managers. Managerial ignorance is therefore defined more as a type of inaptitude to take into account the cumulative effects of organizational imperfections that have already been described. Pauchant and Mitroff(1992) attempted to explain the difficulty of organizations to anticipate and comprehend crises by bringing out psychological defence mechanisms that managers often hide behind when faced with crises or precursors of potential crises. Ignorance is therefore the result of a difference between the complexity of situations and the amount that managers retain about them. At each stage of crises, a dominant ignorance mechanism is discussed and the ways in which these two mechanisms support each other are explored. For each stage of imperfection, managerial ignorance expresses itself differently according to whether the weaknesses are visible or not and whether one is approaching a disruption point. As such four phases can be discussed in the processual development of a crisis.

Phase 1: anomalies and inattention

At the beginning the signs of weakness, in organizations are so normal that they become invisible, especially as their systematic repetition is anticipated. At this stage, these cracks do not disturb the normal operation of an organization in any way. In this first stage, the ignorance mechanisms essentially come down to the acclimatization and standardization of imperfections, the development of these imperfections being a condition for success and

their negotiation as an acceptable state of equilibrium for everybody.

Phase 2: vulnerabilities and attribution

In the second stage, the imbalances are often expressed by incidents or near accidents: individual conflicts, persistent rumours, stoppages, press articles, shares under pressure, an increase in customer complaints, loss of important contracts, recurrent quality problems, higher staff turnover, alarming audit, etc. These imbalances have little effect apart from generating local dysfunctions that are defined and difficult to identify. In this phase, the dominant ignorance mechanism mostly lies in projections and attributions. Attribution enables managers to explain the unease and persistent imbalances by attributing them to external causes or more specifically to causes that, for most of the time they are unable to influence. Attribution to an uncontrollable external cause allows a sort of vindication and temporary way out. It provides an illusion of understanding and enables the time for decisive action to be deferred.

Phase 3: disruptions and denial of reality

This third stage marks the beginning of the visible part of a crisis, its starting point being a more acute event than the others that suddenly uncovers the vulnerabilities and anomalies that have accumulated up to that point. It is at that moment that the disruption occurs, for which most of the time the procedures in place are incapable of providing a satisfactory response. At this point in the process, the combination and juxtaposition of the dysfunctions create a disturbance that is characteristic of a crisis and for which there is no tool or procedure to handle the unfolding event in a definitive way. This stage marks a contrast with the two preceding ones because of

its concise temporal perspective. The contraction in time for management and resuming control implies a series of chain reactions on the part of managers: press of conferences, setting up a crisis management team, etc.

The eruption of a triggering event may dramatize the reflexes of attribution and prediction of responsibility already in place in the previous phase so that they may gradually become limited to a denial of reality.

Phase 4: crisis and escalation

The disturbance stage then gives way to the crisis. The disruption therefore leaves a gaping hole for the organization, its reputation and its management to be put into question. The organizational imbalances updated by the crisis become resonant with other internal and external imbalances. In this last stage, faced with growing helplessness, managers may resort to well-proven solutions. The ignorance mechanism is one of closure and escalation. This position of closure is expressed by strong counter-attack reactions: indictments, court action, press conferences, denials, etc. (Roux-Dufort, 2009)

Making a successful decision, a way to deal with crisis.

Wherever we find a business that is outstandingly successful, we will find that it has thought through the alternatives and has made a concentration decision. The first managerial skill is, therefore, the making of effective decisions. A decision is a judgement. It is a choice between alternatives or between two courses of action, neither of which is provably more nearly right than the other. (Drucker, 2001 pg 379)

In today's rapidly changing environment, management personnel, whether in companies, in non-profit organizations or governmental departments are constantly confronted with decision problems with far-reaching consequences. Survival and long-term success will often depend on finding the right solution.

This means a decision problem has the following characteristics:

- 1-A discrepancy between a current situation and a target situation.
- 2-At least two options for action to achieve the target.

To take a right decision is typically not simple matter, as most decision problems are highly complex in nature. This complexity is due to a number of factors:

- 1-The problem may have numerous dimensions, many of which can only be described in qualitative terms.
- 2-Relationships between the different dimensions may be unclear so that the structure of the problem is obscured.
- 3-The problem may involve more than one division or department of the company or the organization.
- 4-The problem may have a large number of possible alternative solutions.
- 5-Future developments in the relevant environment may be uncertain. (Kuhn, 2005 pg 17-21)

Especially when dealing with crisis problems the right decision could be the organizations rescue.

Support for rational decision making from management science

One of the main focuses of management science is to support executives in dealing with decisions. In addition, management science, like all science, also pursues the goal of explaining reality.

Management as science contributes to practice in two ways:

- Empirical analytical management science develops explanatory models. These explanations of reality can be used in decision-making to predict future developments and to determine the effects of options. Models of purchasing behaviour are a typical example of explanatory models. They show marketing managers how buyers perceive the different offers in a market, how they assess them and how they finally decide in favor of a particular offer.
- Practical normative management science proposes decision-making procedures which can help the actor deal with decision problems.(Kuhn, 2005 pg 46-48)

When we talk about the actor, we are referring to the person or group of people, who analyses, evaluate and act. As head of production he takes the urgent measures, analyses the problem, develops problem-solving options and assesses them. He is the de facto decision-maker and organizes its subsequent implementation. After the discovery of a decision problem analysis normally follows. The actor must understand the problem before he/she can solve it. The results of the analysis form the basis for the development of solution options. The better the analysis and the development and the assessment of options, the easier it is to take the final decision. After the decision is made, what is left is its implementation to be assured.

Financial management decisions

Financial management. Sometimes called corporate finance or business finance, this area of finance is concerned primarily with financial decision-making within a business entity. Financial management decisions include maintaining cash balances, extending credit, acquiring other firms, borrowing from banks, and issuing stocks and bonds.

Financial management encompasses many different types of decisions. We can classify these decisions into three groups: investment decisions, financing decisions, and decisions that involve both investing and financing.

Financial managers are charged with the responsibility of making decisions that maximize owner's wealth. A business that maximizes its owner's wealth allocates its resources efficiently, resulting in an efficient allocation of resources for the society as a whole. (Fabozzi & Peterson, 2003). In other words resources should always be allocated to critical tasks before they are allocated to non-critical tasks. (Howes, 2001)

Human resources

Practices regarded as appropriate by management for overcoming crisis periods with a minimum loss for the company can be interpreted differently by the company itself and the various interest groups. As the basic object of these practices is to achieve positive results in accordance with the major aims of the company, the main focus here has been human resources, and the policies adopted by companies during crises periods have been evaluated from the stand-point of the employees. (Kusku, 2004)

Because of the important part that employees are concerned to have in an organization in achieving competitive advantage, an organization pays more attention in human resources management as the most efficient activity for substantiate its goals.

Human Resource Management (HRM) is a strategic and comprehensive management area that involves establishing policies, practices and administrative structures that focus on organization’s most valuable resource-its people. (Miller, 2000)

Human Resources Management (HRM) is the integrated use of systems, policies, and management practices to recruit, maintain, and develop employees in order for the organization to meet its desired goals. Effective human resource management should help employees find meaningful work and provide them with career satisfaction. It can also help an organization, program or facility to improve its level of performance, increase its success and of course to face up with any financial crisis.

Benefits of Establishing a Strong HRM System	
To the Organization	To the Employee
<ul style="list-style-type: none"> ▪ Increases the organization’s capacity to achieve its goals ▪ Increases the level of employee performance ▪ Use employee skills and knowledge 	<ul style="list-style-type: none"> ▪ Improves equity between employee compensation and level of responsibility ▪ Helps employees understand how their work relates to the mission and values of the organization

<p>efficiently</p> <ul style="list-style-type: none"> ▪ Saves costs through the improved efficiency and productivity of workers ▪ Improves the organization’s ability to manage change 	<ul style="list-style-type: none"> ▪ Help employees feel more highly motivated ▪ Increases employee job satisfaction
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In respect to human resources, for instance, it is highly desirable to have specific objectives for manager supply, development, and performance, but also specific objectives for major groups within the non managerial work force, and for relations with unions. There is a need for objectives on employee attitudes as well as on employee skills. (Drucker, 2001)

People feel motivated and challenged when they have opportunities to learn, develop new competencies, assume new responsibilities, and believe that their efforts will strengthen their careers. Providing these opportunities can also be an important way for you to recognize your employees. Participating in training and other activities where people share learning and value each other’s experience increases staff collaboration and teamwork and can increase overall performance and productivity.

Establishing HRM systems, policies and procedures requires a long-term commitment by an organization’s managers and leaders. In particular, it requires a willingness to take the time to involve employees in developing and maintaining these systems and applying them consistently and fairly. Managers and leaders should view themselves as human resource champions. They should take responsibilities for creating links between the public

and private sectors and with the different organizational actors who influence human resource decisions. Developing and maintaining a fair, equitable, and effective HRM system that provides opportunities for staff development, among other things, will motivate staff and increase their level of job satisfaction. This can result in improving the quality of services. It can also enhance your competitive advantage by increasing the efficiency of your human resources. HRM should be an important part of your long-term strategy to make your organization more sustainable. (Miller, 2000)

Requirements for successful HRM are: appropriate learning and error culture in the organization, innovative forms of learning, and support of the learning process by supervisors.

HRM is a process – from the identification of business demands and company goals, to the adequate training of employees, to complete training controlling that makes measurement of transfer success possible and secures quality.

The key to economic success for every company is to develop the abilities of its employees and to secure their willingness to perform. Not every employee must know or be able to do “everything” and not every employee learns in the same way. Each employee is an individual with regard to his/her learning type, learning motivation, work strategies and initiative. The performance profile of each employee must be continuously adapted to meet current demands in the face of dynamic development of all areas of knowledge. (Sonnentag, 2002)

Today, the individual employee must take increasing responsibility for the business process. Over the past few years, the worker profile has changed because the business environment has changed. Essential abilities to possess

now includes: flexibility, initiative, willingness to take on responsibility, entrepreneurial thinking, team orientation, and co-operation. (iordanoglou, 2008 pg 44-45)

PAST	PRESENT
REALITY	REALITY
People need organizations	Organizations need people
The machines and the capital composes the competitive advantage	People composes the competitive advantage
The talented employees can make a difference	The talented employees indisputably make the difference
The employees are faithful and the work positions safe	The employees are transferring and their devotion is short-lived
The employees accept what is offered	The employees ask for more than what is offered
The work positions are becoming rare	The talented employees are becoming rare

Adaptation of human resources management

- *Aim to the close collaboration with the business units and the managers*

In this way you can realize how managers and employees react to the policies that you try to adapt to the organization and deal in time with the difficulties that might appear during the realization.

- *Broaden your horizons*

It is of a great importance, the executives of the human resources to follow the advancement in the organization and the whole social environment and not to be isolated in their microcosm.

- *Aim at quick victories*

Concentrate to specific sectors so that you can have positive results in a short period of time and make it clear to the managers the need of strengthening their reliance to the sector.

- *Find the right balance*

The right mixture of policies composes the basic element of success. Ambiguity, complexity and plenty of different policies which works against the horizontal alignment, must be avoided.

- *Encourage the creative discussion*

The discussion (communication) with managers can help to the readjustment of the policies in order to be ensured the internal connection and productivity as well.

- *Think methodically*

The consequences that the human resources management policies has to the employees, aren't always easy to be planed and so it is really important to be a systematical registration of the results.

- *Acquire the complete image about personnel of the organization*

The better you know the personnel that will adapt the policies, the better you can provide the possible difficulties that might appear during the realization. It is important to cross the facts with the managers, but most important is to be informed about their values and behaviour.

- *Act with audacity*

It is important to not be afraid to move to daring actions (even if there are not popular) in order to communicate and

realize the desirable behaviour and policy.

- *Keep the best*

Maintain the best practices and employees so that can be achieved the realization of the strategy.

- *Focus on the action*

The policies must be translated in action plans so that they could be realized. (Iordanoglou, 2008, pg 37-38)

Crisis communication

One of the most critical aspects of responding to a disaster situation is implementing efficient and effective crisis communications to both reassure stakeholders and minimize reputational damage.

Crisis communications is the capability of an organization to immediately and effectively communicate a crisis situation and subsequent organizational response to internal stakeholders, external stakeholders, and the media, utilizing the most appropriate mediums, timing and messaging for each group. When changes are made, it is important to make sure those changes are communicated to employees. (Gardner, 2007)

Like all the other aspects of crisis management, crisis communication requires significant thought, planning, testing and review.

Critical elements of a crisis communications plan

A crisis communications plan should identify roles and responsibilities for communications personnel, as well as

capture individuals and contact information for each role. Some roles to consider when creating a crisis communications plan include:

- ◆ Crisis communications team leader
- ◆ Internal communications lead
- ◆ External communications lead
- ◆ Government liaison
- ◆ Legal representative
- ◆ Media coordinator
- ◆ Media coverage monitor(s)
- ◆ Online media specialist

One of the most important tasks of HRM has become the mobilization, processing, and integration of existing elements of knowledge on the organizational level and beyond the organization. Information must be quickly exchanged with customers and suppliers, as well as between departments. A focused acquirement of knowledge, the efficient communication of knowledge, and the professional handling of information all play a role in the success of the company. The task of the HRM department is to professionally support the process of knowledge management, and to strengthen the company through knowledge management. This contributes to the collection of new ideas and innovations through the exchange of knowledge.

In this crisis period that markets and integration are a common phenomenon, the consolidation of a public organized culture, aimed to the achievement of the vision and organizations object, is still an important topic that

occupies the professionals of human resources.

The management of employees who come from different organizations or even different countries and the homogeneity of the different mentalities and behaviour often composes headache to the human resources professionals, but simultaneously a challenge because the diversity can bring advance and creation.

In such situations there is a great need for successful internal communication in order that every change, initiative or message can be passed to the employees in a clear way. Especially the need of continuous education and development of the employee, would be a challenge for the human resources managers. (Iordanoglou, 2008)

Research

For the present study, a questionnaire which includes dichotomous and multiple choice questions was shared to 30 employees of the private sector.

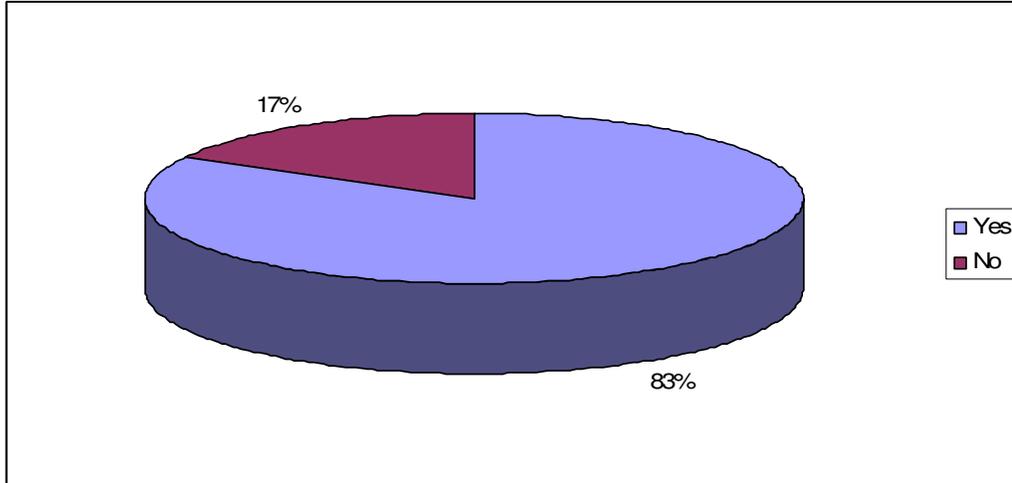
Gender	Number of people asked
Male	13
Female	17

Age	Number of people asked
18-25	5
26-35	16
36-45	6
46+	3

Questionnaire

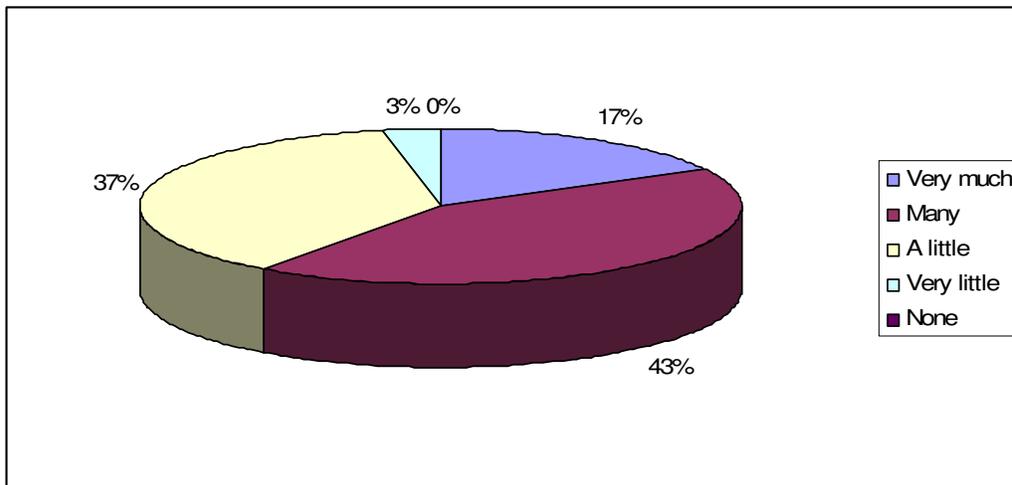
Question 1

Do you believe that the recently economic crisis has affected your sector?



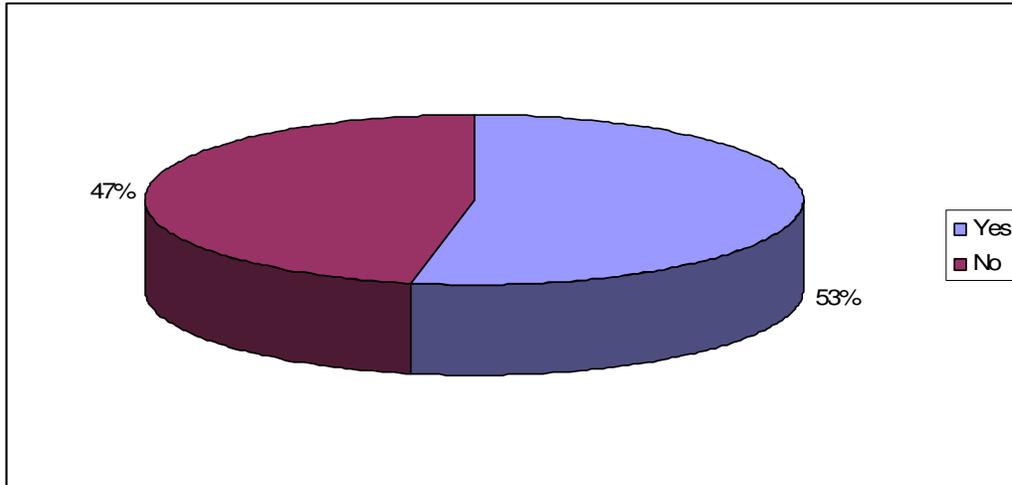
Question 2

In which grade do you believe that the economic crisis has influenced your organization?



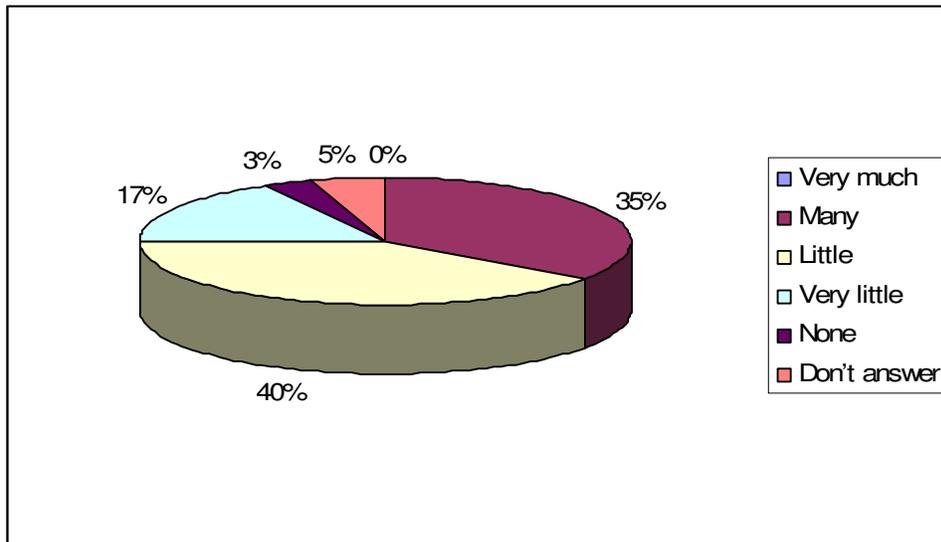
Question 3

Has your company undertaken any actions related to crisis management?



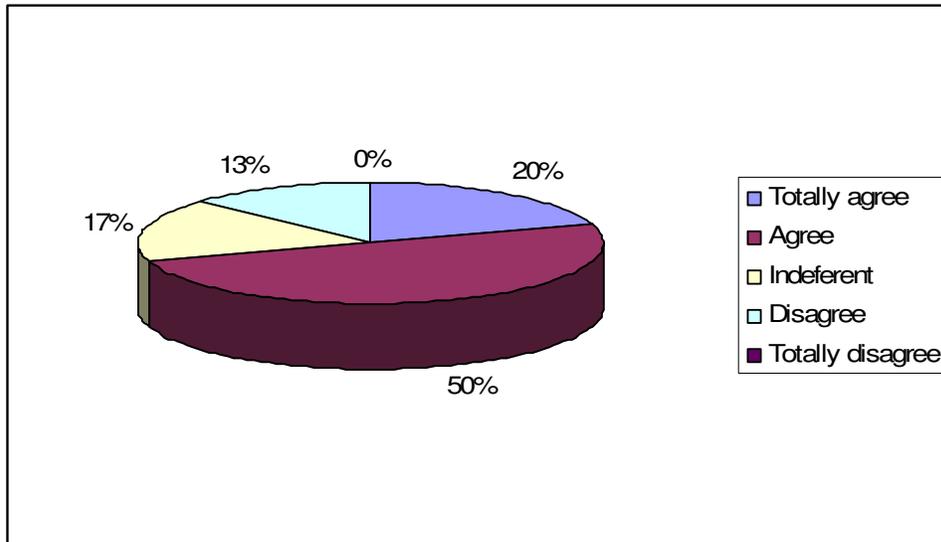
Question4

How efficient do you consider these actions were?



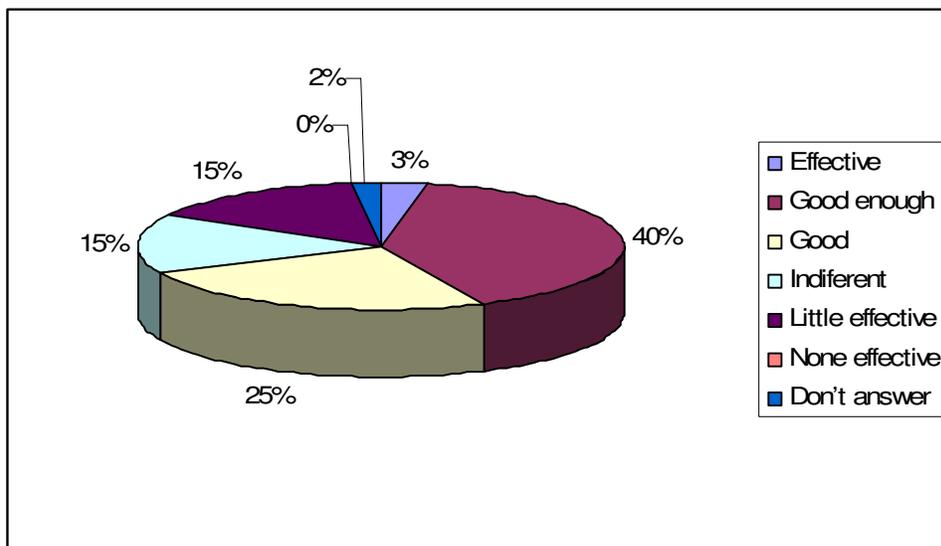
Question 5

Do you believe that an efficient crisis management policy improves the organizations productivity?



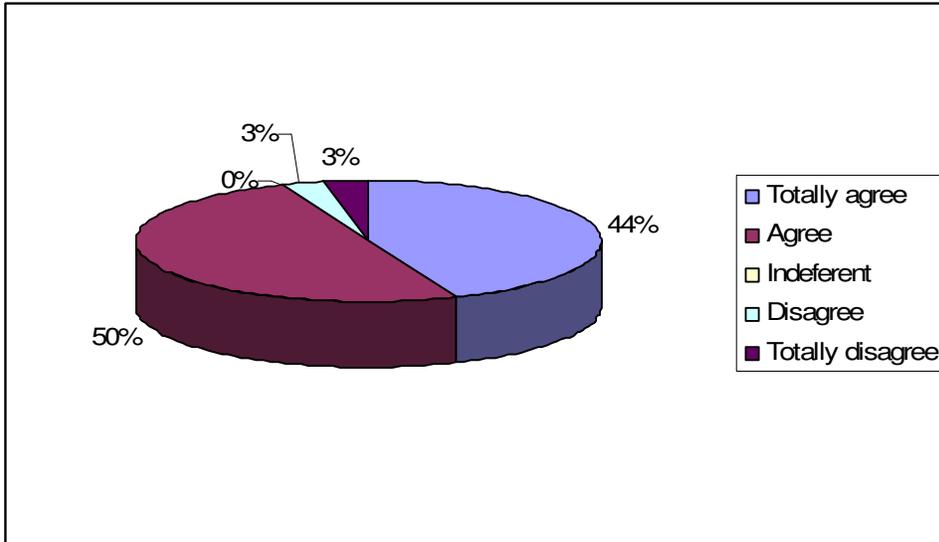
Question 6

Which you consider was your adaptability to these policies?



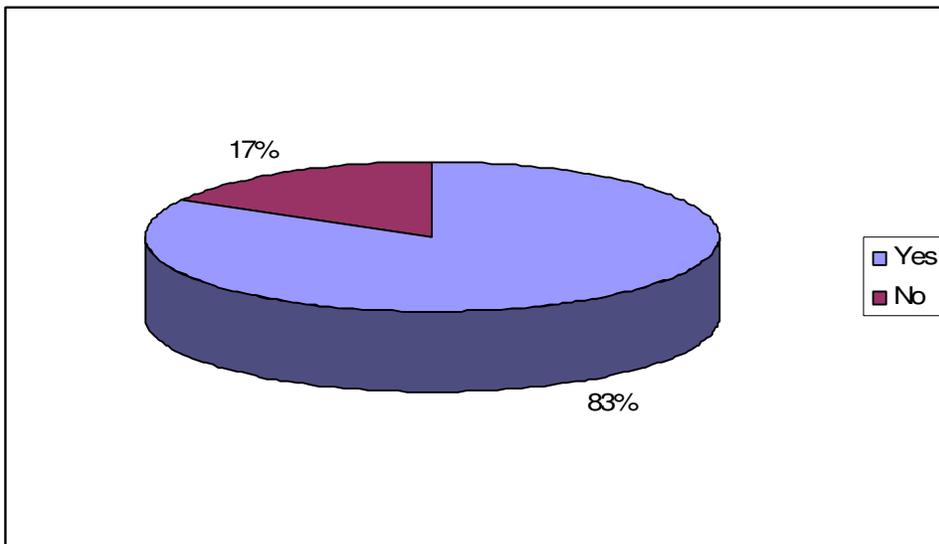
Question 7

Do you consider that a proper policy for human resources management of a company is equivalent to a more efficient way of pumping of knowledge and capabilities from employers?



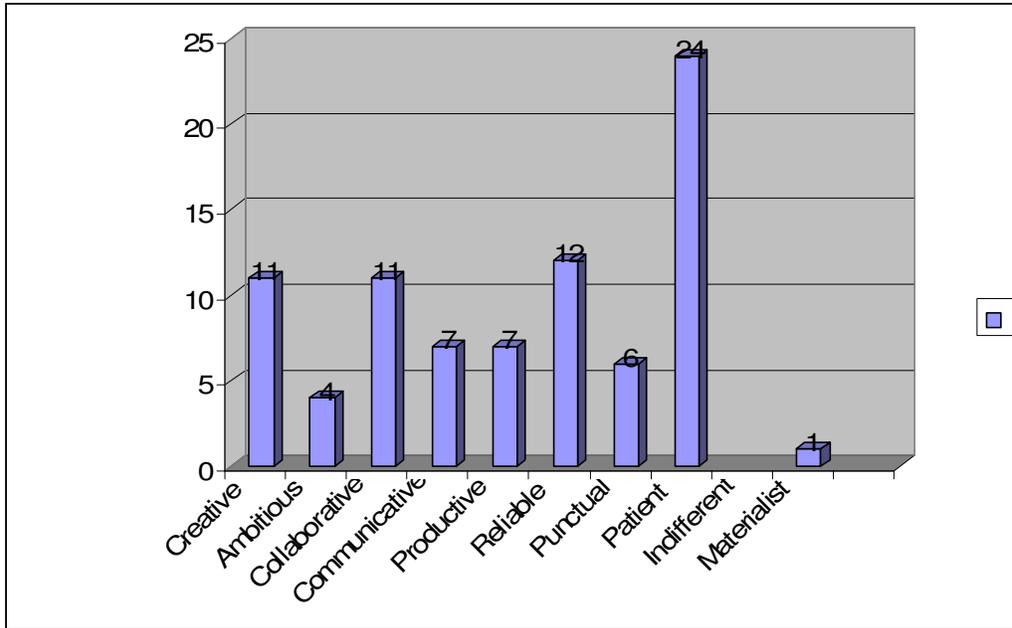
Question 8

Do you believe that if the required consideration is given to human resources management, this will make you feel more responsible and aware of your business obligations?



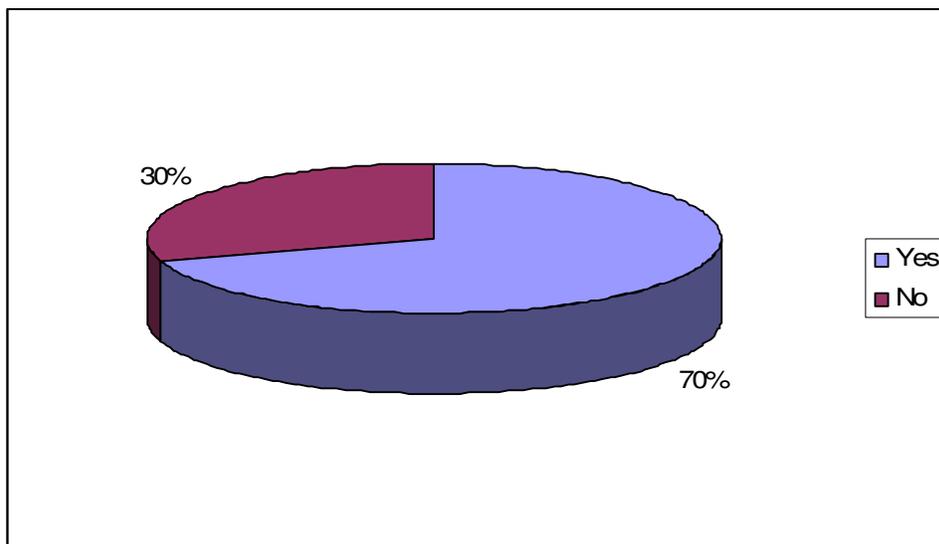
Question 9

How you believe that the modern employee should be in this crucial economic period we are living?



Question 10

Do you consider that the harmonization with the stated management policies is the most effective way out from the crisis?



Discussion

In our questionnaire we tried to show the importance that an effective human resources management policy could have in the present economic crisis period. Our aim was to point out that employees are the most important resource in an organization. We tried to achieve this by our sample that was consisted of thirty (30) employees in the private sector. Among them, fourteen (14) work in a private bank and sixteen (16) in a service provider company.

We noticed that the overwhelming majority of the questioners (about 83% of them) have felt the influence of the economic crisis in their sector. To be more specific, 17% believe that the economic crisis has affected their organization very much, 43% believe that it has affected a lot, 37% a little and just 3% of them they noticed a very little influence on their organization.

A bit more than a half of the employees (53%) have remarked policies related to overcoming the crisis, but none of them found these policies very much efficient, 35% of them believe there are a lot efficient, 40% believe that there are little efficient, 17% very little and just 3% of them they don't find them efficient at all.

In the questionnaire is clear that the 70% of the questioners (20% totally agree and 50% agree) agree that an efficient crisis management policy improves the organizations productivity giving their strong consideration (94% where 44% totally agree and 50% agree) to the human resources management policies as the more efficient way of pumping of knowledge and capabilities from the employees their self. The 83% of them states that they will feel more responsible and aware of their business obligations in such situation. They pretend that if is given the proper attention to them, this will urge them to give the proper attention on their work.

As to the adaptability of them to the policies that their organization has practiced, 40% consider their adaptability is good enough, 25% good, 3% of them think they have an effective adaptation and 15% choose the indifferent and

little effective option.

When it comes to the abilities that the modern employ might have in order to face up the present crisis, 24 of the employees maintain that he/she would be patient, 12 of them reliable, 11 of them creative and collaborative as well, 7 of them communicative and productive, 6 of them punctual, 4 of them ambitious and just one believe that he/she would be materialist. It is quiet normal for the employers to require particular abilities from their employees, abilities that to a great extend are considered as the most appropriate. From these statistics we can understand that patience, reliability and collaboration show up as the most necessary abilities that composes the portrait of the most qualified employee who can definitely manage the way to get over the crisis period.

Finally over the half of the questionnaires (70% of them) believe that the harmonization with these policies is the most effective way out of the crisis.

Conclusion

Crisis offers precisely the opportunity of re-examining normality and of using the unusual to understand regularity.

A selective theory of crisis makes this meeting point between singularity and regularity possible as it is because there is a regularity of weaknesses and ignorance that there is a singularity in the event. Managers should use the events to be aware of recurrent vulnerabilities, their development and their roots. It is by creating a bridge between the unusual and the regular that managers can restore the event's capacity to reconfigure possibilities and therefore draw from its learning and change potential. (Roux-Dufort, 2009)

Through the examining of the regularity that these vulnerabilities and weaknesses are shown in an organization, the managers discovers what is the wrong element that brings the crisis to their doorstep and how it can be fixed. They noticed that if they invest in their human capital, they invest in their organizations future.

In conclusion, when looking at the human resources practices of organizations in recent years, which can be defined as crises years, we see that they cannot be called unsuccessful. It is observed that within the organizations in the sample group, in crisis periods, we encounter results that can be regarded as positive as well as some that can be regarded as negative from the employees stand point.

Although reducing the number of employees can be qualified as a negative effect of the crisis period from the employees stand point, increasing practices aiming at integrating the employees with the organization with the objective of restructuring the psychological state of the employees can be regarded as a positive effect of this period.

HRM in the future must consider both personnel and economical aspects. Furthermore, HRM must be embedded in a visionary goal system that optimally prepares employees for increasing world demands. (Sonntag, 2002)

Ultimately, an HRM system is the responsibility of all staff-leaders, managers, service delivery, and administrative personnel. Human resource leaders create the organizational and management structure for human resources development, and managers and staff at all levels implement the HRM system. A human resource partnership between senior managers, supervisors, human resource professionals, and staff is what makes an HRM system works. (Miller, 2000)

Finally we can conclude that the present work demonstrates the connection between economic crisis and human resources of an organization. Through the study we did in combination with the statistics results we collected from the questionnaire, we ended in the conclusion that an effective management policy of human resources could be a way out of crisis or at least can reduce the loss of organizations profit.

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THE MODERATING EFFECTS OF GROUP CULTURE ON THE RELATIONSHIP BETWEEN PERSONALITY TRAITS AND CUSTOMER ORIENTED-BEHAVIOR IN THE HEALTH TOURISM HOSPITALS IN MALAYSIA

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Abstract

The purpose of this paper is to examine the moderating effect of group culture on the relationship between personality traits and customer-oriented behavior in the health tourism hospitals. This study involved 343 nurses in the 13 health tourism hospitals in Malaysia. Administered on-site questionnaire survey was used as the main method of data collection. Hierarchical regression analysis was performed and found statistical significant relationship between personality traits and customer-oriented behavior as well as positive moderating effects of group culture.

Keywords: Customer-oriented behavior, personality traits, group culture, health tourism hospitals.

1. Introduction

Health tourism has been a rapidly-growing industry since the Asian economic crisis in 1998 (Rad, Mat Som & Zainuddin, 2010). Like many other countries, Malaysia has realized the importance of economic diversification and actively involved in developing health tourism since 2005. However, the health tourism industry in Malaysia is beginning to experience mounting expectation as patients are viewing healthcare services from different angles and perspectives. Patients are not focusing only on the technical dimension and outcome of the medical treatment but stressing on the standard of care delivered by the healthcare providers. In light of the increasing expectations, one of the measures to improve standard of care is to transform the healthcare system to a customer-oriented management style targeted on

customer-oriented behavior in the organization. Unfortunately, little information is available to pinpoint specific areas of customer-oriented behavior concerns in the Malaysian health tourism industry. Hence, this paper aims to determine the personality trait dimensions that influence customer-oriented behavior and the moderating effects of group culture on the relationship between personality traits and customer-oriented behavior.

2. Theoretical Background and Hypothesis

The term customer-oriented behavior is referring to particular behaviors exhibited by individuals during service encounters and such behaviors will lead to satisfying customers (Farrell, Souchon & Furden, 2001). Scholars have specifically defined customer-oriented behavior as understanding customers' needs, assisting customers to attain their goals and influencing customers by providing information and assistance rather than by imposing pressure. It is also viewed as employee's predisposition or tendency to meet customer needs in a workplace context (Donavan, Brown & Mowen, 2004). In the healthcare context, customer-oriented behavior focuses generally on understanding patients' interests and needs by delivering proper solutions. Daniel and Darby (1997) explained the term customer-oriented behavior as the service behavior and ability of the care providers to adjust their service in order to reflect patients' reality. On the same note, Darby and Daniel (1999) emphasized that the aspects of caring processes need to be accommodated into customer-oriented behavior to fulfill patient needs in terms of intimate and complex service means. Hence, this paper has identified customer-oriented behavior as a primary influence in formulating expectations and controlling patient experiences.

Trait Theory by Allport (1961) posits that a person's behavior will be generated consistent with his or her personality traits. It allows an in-depth understanding of a person's personality and his personality traits could potentially affect his behavior in an organization. There were empirical studies such as Frei and McDaniel (1998), Barrick and Mount (2005), Brown, Mowen, Donovan and Licata (2002), Liu and Chen (2006), Perriatt, Chakrabarty and Lemay (2007), Lanjananda and Patterson (2009) and Mechinda and Patterson (2011) reported that personality traits have a significant relationship with customer-oriented behavior because it represents the innate characteristics of a person. Parallel to the empirical findings, this study used the Big Five personality traits as predictors to customer-oriented behavior. The Big Five personality traits encompassed openness to experience, conscientiousness, extraversion, agreeableness and neuroticism (McCrae & Costa, 1996).

The Social Information Processing Theory addresses how people learn their behavior by studying the informational and social environment within which the behavior occurs and to which it adapts (Salancik & Pfeffer, 1978). Kiesler (1971) and Salancik (1977) stated that it has been repeatedly found that when individuals are committed to a situation, they tend to develop attitudes consistent with their commitment and their committing behavior. Hence, situational variable such as culture has significant influence on work-related behavior that reflects employee's performance in the organization. This study was motivated by the notion suggested by Schimmack, Radhakrishnan, Oishi, Dzokoto and Ahadi (2002) that culture moderates and interacts with personality in complex ways to affect human behavior. Group

culture was selected as the moderating variable because it emphasizes on broad participation by employees, promote internal communication and emphasis on teamwork and empowerment. Individuals who worked in a group culture accentuate on moral, high cohesion, caring and high commitment. Group culture is essential in enhancing customer-oriented behavior. Based on the above rationale, the research framework (see Figure1) is established with the following hypothesis:

H1: Group culture moderates the relationship between openness to experience and customer-oriented behavior.

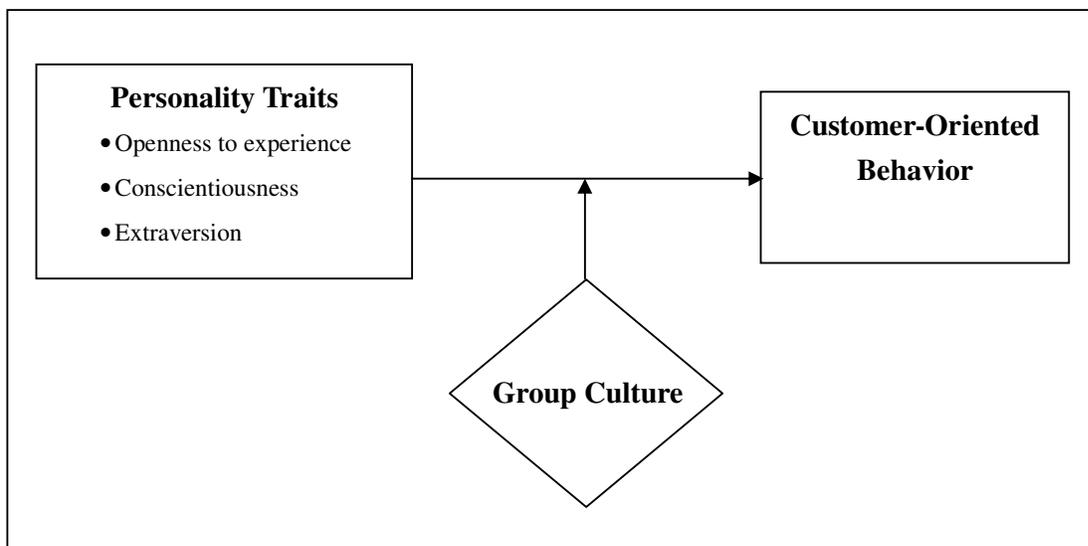
H2: Group culture moderates the relationship between conscientiousness and customer-oriented behavior.

H3: Group culture moderates the relationship between extraversion and customer-oriented behavior.

H4: Group culture moderates the relationship between agreeableness and customer-oriented behavior.

H5: Group culture moderates the relationship between neuroticism and customer-oriented behavior.

Figure 1: Research Framework



3. Methodology

3.1. Measurements

The Selling Orientation Customer Orientation (SOCO) scale by Saxe and Weitz (1982) was adapted for measuring customer-oriented behavior in this study. It contains 12 items of positively phrased

customer-orientation items. Measures of the personality traits were based on the Big Five Inventory (BFI) by John and Srivastava (1999). There are a total of 44 items adapted from the BFI. The group culture measures used in this study were developed by Shortell, O'Brien, Carman, Foster, Hughes, Boerstler and O'Connor (1995). It contains 5 items of the questionnaire. The questionnaire employs a five-point Likert scale with anchors ranging from 'strong disagree' to 'strongly agree'. The units of analysis for this study are individual nurses employed in the health tourism hospitals for a minimum of 1 year. Administered on-site questionnaire survey was used as the main method of data collection. Through this method, a total of 343 usable questionnaires were obtained out of 349 questionnaires collected.

3.2. Validity and Reliability

All the constructs in the research framework were validated through factor analysis. The Principal Component Analysis (PCA) with varimax rotation extracted four factors for personality traits (i.e. openness to experience, conscientiousness, extraversion and neuroticism) and a single factor for both customer-oriented behavior and group culture. The number of items extracted for each constructs were shown in Table 1. The reliability test results indicated that the value of Cronbach's Alpha for all the constructs in this study wereranged from 0.716 to 0.898. These figures as presented in Table 1 exceeded the cut-off of 0.70 as suggested by Nunnally (1978), Robinson, Shaver and Wrightsman (1991) and DeVellis (2003). Hence, the measuring items of all constructs were deemed reliable.

Table 1: Reliability Coefficients for Constructs

Constructs	Number of Items	Cronbach Alpha
Openness to Experience	7	0.779
Conscientiousness	4	0.727
Extraversion	5	0.725
Neuroticism	5	0.716
Customer-Oriented Behavior	11	0.898
Group Culture	5	0.744

4. Results and Discussions

4.1 Respondents Demographic Profiles

The respondents of this study were 86% female and 14% male. The higher number of female respondents shows that the nursing profession is still dominated by the females in this country. Among the respondents, majority of them were in the age between 26 and 35. They constituted 23.3% of the respondents. The

second largest age group was 18-25 (32.9%) followed by those between 36-45 years old (23.3%) and 46-55 years old (5.0%). As for length of service in the hospitals, 40.8% respondents have worked between 3 to 5 years whereas 34.4% respondents have 1 to 2 years of working experience. Respondents who have 6 to 10 years experience constituted 21.3% and the remaining respondents(3.5%) have worked for 11 to 15 years.

4.2. Hierarchical Regression Analysis

Since there were only four factors extracted from personality traits, the hypothesis wererestated as below:

H1: Group culture moderates the relationship between openness to experience and customer-oriented behavior.

H2: Group culture moderates the relationship between conscientiousness and customer-oriented behavior.

H3: Group culture moderates the relationship between extraversion and customer-oriented behavior.

H4: Group culture moderates the relationship between neuroticism and customer-oriented behavior.

Hierarchical regression analysis was employed to test the entire hypothesis. To examine the moderating effect of group culture, the data were mean-centered to avoid the problem of multicollinearity when multiplying group culture with personality traits dimensions. The results of the analysis were shown in Table 2. Table 2 indicates that the R-square value of Model 1 is 0.249. It denotes that 24.9% of the variance in customer-oriented behavior can be explained by the variations in openness to experience, conscientiousness, extraversion and neuroticism. The F statistic (28.043) was significant at the 0.001 level. The results reveal that openness to experience ($\beta = 0.443$, $p < 0.001$) and conscientiousness ($\beta = 0.110$, $p < 0.05$) were positively related to customer-oriented behavior. It implies that individuals who possess personality traits of openness to experience and conscientiousness are prone to exhibit customer-oriented behavior.

Model 2 and Model 3 indicate the moderating effects of group culture on the relationship between personality traits and customer-oriented behavior. Both models are significant at the 0.001 level with F value of 33.065 and 19.486 respectively. The R-square has increased from 0.249 to 0.329 with the inclusion of group culture. Apparently, group culture has added the explanatory power of the model by 8%. Further inclusion of interaction variables in Model 3 reveals that R-square value has increased even higher from 0.329 to 0.345. It reflects that the interaction variables have an influence on the dependent variable. This is evident when interaction term between group culture and extraversion ($\beta = -0.095$, $p < 0.05$) was statistically significant at the 0.05 level whilst other interaction terms were not statistically significant. Hence, hypothesis H3 was supported whereas hypotheses H1, H2 and H4 were rejected.

Table 2: Hierarchical Regression Analysis Results

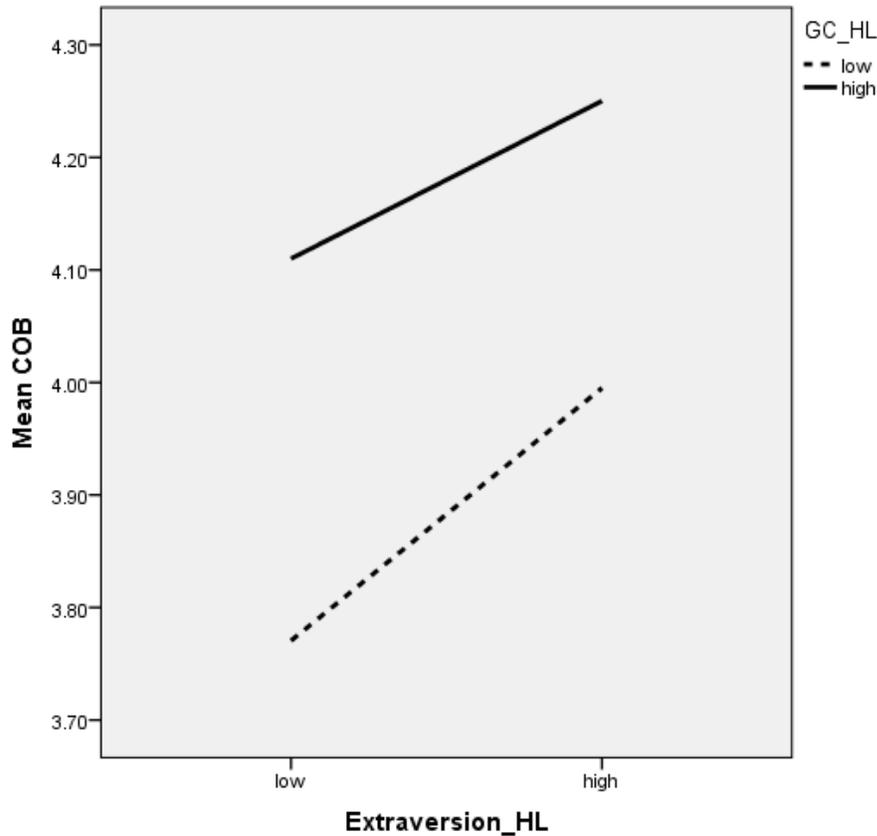
Independent Variables	Dependent Variable
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	Customer-Oriented Behavior		
	Model 1	Model 2	Model 3
Independent Variables			
Openness to Experience (O)	0.443***	0.349***	0.340***
Conscientiousness (C)	0.110*	0.090	0.086
Extraversion (E)	-0.001	0.007	0.022
Neuroticism (N)	-0.070	-0.052	-0.035
Moderating Variable			
Group Culture (GC)		0.301***	0.327***
Interaction Variables			
GC_c x O_c			-0.040
GC_c x C_c			-0.015
GC_c x E_c			-0.095*
GC_c x N_c			0.059
F value	28.043***	33.065***	19.486***
R square	0.249	0.329	0.345
Adjusted R square	0.240	.319	0.327
R square change	0.000	0.080	0.016

***significant at the 0.001 level *significant at the 0.05 level

To better understand the moderating effect of group culture, a graphical illustration was used as depicted in Figure 2. Figure 2 shows that individual who worked in a high group culture exhibited higher level of customer-oriented behavior than those who worked in the low group culture. The graph also illustrated that either the individuals worked in a high or low group culture, those who have high extraversion displayed higher level of customer-oriented behavior than those who have low extraversion. In addition, it is also noted that customer-oriented behavior is higher in situations where group culture is high irrespective of extraversion. Hence, group culture is demonstrating the role of a predictor as well as a moderator. It is a quasi moderator.

Figure 2: Interaction of Group Culture and Extraversion in Predicting Customer-Oriented Behavior



5. Conclusion

The results of the hierarchical regression analysis show that the interaction term between group culture and extraversion is significantly related to customer-oriented behavior. This finding is consistent with Tett and Burnett's (2003) trait-based model where it explained the moderating effect of culture on the relationship between personality traits and work behavior. Additionally, it also supports Barrick and Mount's (2005) statement that moderating variables must be accounted in the study in order to adequately explain the influence of personality traits on human behavior. In general, it can be concluded that examining the relationship between personality traits and customer-oriented behavior and group culture as a moderator is firmly grounded in the research framework underpinned by Traits Theory and the Social Information Processing Theory. In terms of practical implication, this study may be of help to healthcare managers to select customer-oriented nurses by identifying their patterns of personality traits. In addition, it also represents the efforts offered to explain the importance of group culture in enhancing customer-oriented behavior. This study is very relevant in the present time because it provides managerial implications for the healthcare providers to offer high standard care and promote health tourism in the country.

6. Limitations and Future Research

This study has several limitations which need to be addressed in future research. Firstly, using nurses as respondents of this study limits the generalizability of this study. Future study may include different

group of respondents such as doctors and administration staffs to provide a better representation of the study. Secondly, the independent variables of this research were limited to personality trait dimensions only. Future research may consider other individual factors such as job satisfaction and organizational commitment to provide a better explanation of customer-oriented behavior among the respondents.

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Effects of Education and Training on “Human Capital - And Effects of Human Capital on Economic Activity (A Literature Based Research)

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Abstract

Human capitals refer to processes relating to education, training, and other professional initiatives for increasing the levels of knowledge, skills, abilities, values, and social assets of employees, leading to satisfaction and performance of the employees, and eventually increasing economic activity. This paper is focused on discussing the effects of education and training in building human capital and effects of human capital in economic growth.

Introduction

According to Bassanini & Scarpetta (2002) in the recent growth literature the accumulation of human capital has gained a central role. Marimuthu et al (2009) expressed that ‘Human Capital’ with increasing globalization and the saturation of the job market is getting wider attention especially due to the recent downturn in the various world economies. All the countries emphasize on a more human capital development by devoting necessary efforts and time to accelerate the economic growth. Thus to enter the international arena one of the fundamental solutions is human capital development. Firms must develop human capital by investing necessary resources, which tend to have a great impact on performance and, firm performance is viewed in terms of financial and non-financial performance. Marimuthu et al (2009) revealed that human capitals refer to processes relating to education, training, and other professional initiatives for increasing the levels of knowledge, skills, abilities, values, and social assets of employees, leading to satisfaction and performance of the employees, and eventually increasing firm performance. Marimuthu et al (2009) also narrated that most firms in response to the changes, have embraced the notion of human capital that has a good competitive advantage and will enhance higher performance. Human capital development becomes a part of an overall effort to achieve cost-effective and firm performance. Hence, firms need to understand human capital that would improve performance, enhancing satisfaction of employee. Although there is a broad assumption that human capital has positive effects on performance of the firms, the notion of performance for human capital remains largely untested. Alani, & Isola (2009) considered human capital as human beings possessing skills, knowledge and attitudes, utilized in the production process and believed it the most important factor of production, and the most active catalyst of economic growth and development.

Origin of Concept of Human Capital

Malloch (2003) and Germon et al (2011) mentioned that the human capital concept was developed first by Nobel-Prize winning economist, Theodore W. Shultz by coining the term “human capital” which first appeared in an *American Economic Review* article, “Investment in Human Capital”, in 1961 and concept later on was popularized by Garry Becker.

Malloch (2003) also revealed that most economists agreed that human capital comprises skills, experience, and knowledge some add personality, appearance, reputation, and credentials to the mix and still some others, equate human capital with its owners, suggesting human capital consists of “skilled and educated people”.

Owings et al (2012) stated with citations that Adam Smith without mentioning education contended in the 18th century that one type of human labor added value to the national economy while another type of labor did not. The importance of the labor force in economic growth, later led to the idea of human capital theory, which, according to Olaniyan & Okemakinde (2008) is the theoretical framework most responsible for the wholesome adoption of education and development policies.

What is Human Capital – concept

Ballot et al (2001) commented that workers’ human capital is very important because the firms are able to augment this capital by hiring educated workers and by training their existing workers.

Malloch (2003) also revealed that newer conceptions of ‘**total human capital**’ view the value as an investment. A researcher Thomas O. Davenport, in ‘Human Capital: What It Is & Why People Invest It (1999) looked at how a worker performs depending on ability and behavior. For him, the choice of tasks also needs a time allocation definition. The combination of ability, behavior, effort, and time investment produces performance, the result of personal investment. Thomas O. Davenport gave the mathematical relationship in the form of an equation as:

$$\text{Total Human Capital} = (\text{Ability \& Behavior}) \times \text{Effort} \times \text{Time investment}$$

Or

$$\text{THC} = \text{A \& B} \times \text{E} \times \text{T},$$

In this equation THC (stands for **Total Human Capital**) = **A** stands for ability, **B** stands for behavior, **E** stands for effort **T** stands for (time), and x is sign of multiplication. In this equation a multiplicative relationship enhances the outcome.

Marimuthu et al (2009) asserted referring many studies that human capital theory is rooted from the field of macroeconomic development theory. Capitals have different kinds including: schooling, computer training course, and medical care expenditures, and in fact, lectures on the virtues of punctuality and honesty are also capital, because, they improve health, raise earnings, and add to a person's appreciation of literature over a lifetime. Human capital refers to the knowledge, expertise, and skill one accumulates through education and training. Similarly Germon et al (2011) also with references mentioned that human capital is the aggregation of intangibles assets incorporated by individuals, such as knowledge, experience, skills etc. Human capital is a set protean and highly volatile as likely to disappear with the departure of those who hold this capital.

Rizvi (2011) mentioned that human capital means a stock of skills and knowledge resulting in the ability to perform labor so as to produce economic value. It is the skills and knowledge gained by a worker through education and experience with different areas in that field.

Stiles & Kulvisaechana (n.d) are of the view that it is generally understood that 'human capital consist of the capabilities, knowledge, skills and experience of the individual employees and managers, of the company as they are relevant to the task at hand, as well as the capacity to add to this reservoir of knowledge, skills, and experience through individual learning.

Alani, & Isola (2009) expressed that human capital means human beings who have acquired skills, knowledge and attitudes, which are needed to achieve national development. They help to realize organizations' objectives with the overall intention of promoting national growth and development. The skills, knowledge and attitudes gained through human capital formation are a direct result of deliberate investments in human beings. Human capital has become important in the development process because human beings are the most-prized assets of a nation. Other factors of production such as unskilled labor, land, financial capital and physical capital to create wealth need skilled human resources. Countries that have realized sustainable development have invested heavily in human beings. A nation with abundant natural resources without skilled human resources cannot achieve its full potentials. Technical innovations occurred in the developed countries and a few developing countries are a product of human capital development. With the development of creative potentials of people, their ability to participate in the development process is enhanced. In spite of the fact that human capital development also focuses on self-development so that individuals can realize their potentials and meet their aspirations, the key objective of human capital formation is the transformation of the political, social, economic and technological life of the society. Human capital development focuses on all activities directed toward producing people with appropriate skills, knowledge, attitudes, motivation and job-related experience required for national development. Human development also occurs when national development goals are realized, since human beings are expected to be the objects of development. The significance of human resources in the development process has therefore compelled its development.

Blundell et al (1999) revealed three main components of ‘human capital’ naming 1- early ability (whether acquired or innate); 2- qualifications and knowledge acquired through formal education; and 3- skills, competencies and expertise acquired through training on the job. Human capital concept arose from the recognition that decision of an individual or a firm to invest in human capital (i.e. undertake or finance more education or training) is like other decisions of individuals or firms about other types of investments. Human capital investments involve an initial cost (tuition and training course fees, forgone earnings while at school and reduced wages and productivity during the training period) which the individual or firm hopes to gain a return on in the future (for example, through increased earnings or higher firm productivity).

Owings et al (2012) stated that human capital is the acquisition of knowledge, skills, and other competencies, which have economic value, especially in technically advanced countries.

Effects and Role of Education and Training in Building Human Capital

1- Education and its Effects

According to Qadri and Waheed (2011) education is the most important determinant of human capital affecting the output through various channels e.g. by increasing knowledge helping to produce more output in relatively smaller time and also intuitively suggesting that educated persons could learn much faster. Education also enhances the participation of labor force in the economy particularly in the case of female participation and due to the higher labor force participation rate output further increases. The role of experience along with education in productivity growth is also very important because generally experience increases the output in a given time period by reducing the chances of errors.

Awan et al (2011) expressed with citations that the base of ‘Human Capital Theory’ is mainly on education because it imparts knowledge and skills. According to various researches investment in education enables the poor to escape from poverty. Education affects the poverty status of the persons through various channels. The direct effects of education are pecuniary benefits, accruing through more income or wages. Investment in education increases individual’s ability and making them more efficient and more productive. Persons, with more productivity and better skills have more choices and opportunities, and more opportunities are helpful in getting good job or doing good business and causes increasing the income level.

Owings et al (2012) squeezing from literature stated with citations that Adam Smith without

mentioning education contended in the 18th century that one type of human labor added value to the national economy while another type of labor did not. Countries by investing in their people through education and training, can enlarge the range of choices available to their citizens, improve their health and economic outcomes, and expand the economic and national betterment. In modern industrial economics near two-thirds of all economic value is created through direct investment in human capital and the skills of the active workforce. Education increases human capital in academic, political, and economic ways. Academically, education provides training in functional skills (such as reading, writing and arithmetic), higher-level cognitive skills (including problem solving, abstract reasoning, and creative thinking), and knowledge of topics necessary to living competently in the modern world. Politically, education socializes members of a society to develop strong allegiance to a common national identity rather than tie their loyalties more narrowly to local or religious groups. Economically, education widens knowledge, skills, and awareness of ideas and practices of people outside their immediate experiences. In this way, learning makes individuals receptive to fresh information, creating a “modern person” who acquires the aspirations and attitudes, which welcome new technologies and make them easier to master. More is the schooling the greater are its effects.

Olaniyan & Okemakinde (2008) commented that the belief that education is an engine of growth rests on the quality and quantity of education in any country. Empirical evidences of human capital model revealed that investment in education has positive correlation with development and economic growth.

McDonald & Roberts (2002) concluded that education capital alone is a potentially inadequate proxy for human capital as a factor in the determination of growth, while the importance of country and time-specific fixed effects challenge the assumptions of common initial states of technology and constant rates of technical progress.

Olaniyan & Okemakinde (2008) expressed that education is an economic good because it is not easily obtainable and thus needs to be apportioned. Economists regard education as both consumer and capital good because it offers utility to a consumer and also serves as an input into the production of other goods and services. As a capital good, education can be used to develop the human resources necessary for economic and social transformation. The focus on education as a capital good relates to the concept of human capital, which emphasizes that the development of skills is an important factor in production activities. It is widely accepted that education creates improved citizens and helps to upgrade the general standard of living in a society. Therefore, positive social change is likely to be associated with the production of qualitative citizenry. This is an increasing faith that education is an agent of change in many developing countries. The pressure for higher education in many developing countries has undoubtedly been helped by public perception of financial reward from pursuing such education. Generally, this goes with the belief that expanding education promotes economic growth.

Olaniyan & Okemakinde (2008) also expressed that human capital theory rests on the assumption that formal education is highly instrumental and even necessary to improve the production capacity of a

population. The human capital theorists argue that an educated population is a productive population. Human capital theory emphasizes how education increases the productivity and efficiency of workers by increasing the level of cognitive stock of economically productive human capability, which is a product of innate abilities and investment in human beings. The provision of formal education is seen as a productive investment in human capital, which the proponents of the theory have considered as equally or even more equally worthwhile than that of physical capital. The rationality behind investment in human capital is based on three arguments:

- (i) - That the new generation must be given the appropriate parts of the knowledge which has already been accumulated by previous generations;
- (ii) - That new generation should be taught how existing knowledge should be used to develop new products, to introduce new processes and production methods and social services; and
- (iii) - That people must be encouraged to develop entirely new ideas, products, processes and methods through creative approaches.

Human capital theory provides a basic justification for large public expenditure on education both in developing and developed nations. Its appeal was based upon the presumed economic return of investment in education both at the macro and micro levels. Efforts to promote investment in human capital were seen to result in rapid economic growth for society. For individuals, such investment was seen to provide returns in the form of individual economic success and achievement.

Quantitative Estimates of the Returns to Education

Blundell et al (1999) expressed that education confers significant wage advantages to individuals. Studies accounting for the direct and indirect costs of education show positive net rates of return. The average estimate of the gross rate of return to a year's additional education ranges between 5 and 10 per cent. During one of the most recent studies in the UK found that the average annual return of undertaking an extra year of fulltime education is 5.5 per cent for men and 9.3 per cent for women but these returns vary significantly by the type of qualification obtained. Men who complete five or more O levels (or equivalent qualifications) receive an average return of around 21 per cent and women 26 per cent compared with individuals who complete no qualifications before leaving school at 16, normally completion age of O-level qualifications. For those completing an A-level school qualification, the additional return is around 11 per cent for women and 13 per cent for men (compared with individuals with five or more O levels). The average annual return to a first degree in terms of hourly wages (compared with just A levels) has been found to be in the range 5–8 per cent for men and around 10–13 per cent for women.

Owings et al (2012) mentioned the conclusion of some economists that advances in knowledge contributed 23 % of the growth in the U.S. between 1950 and 1962.

2- Training and its Effects

Blundell et al (1999) stated that training is distinguished from formal school and post school qualifications (viewed as education) and is generally defined in terms of courses designed to help individuals to develop skills that might be of use in their job. Blundell et al (1999) pointed out that part of the benefits from training investments, in the firm are derived, from their positive influence on subsequent occupational status and likelihood of promotion. Besides this trained workers are much less likely to quit their jobs or switch over to other job or to be made redundant. Trained workers are also much less likely to experience spells of unemployment.

Blundell et al (1999) expressed that the benefits of work-related training are quite large. It is interesting to establish what sorts of individuals receive this training. What is clear from looking at the determinants of training is that individuals with higher ability (as measured by aptitude scores), with higher educational attainment, who have undertaken training in a previous period or with higher occupational status and skills are significantly more likely to participate in training. A number of studies point to the potential importance of early intervention even at nursery-education level: early achievement and qualifications appear to be key determinants of future educational attainment and wages.

Blundell et al (1999) argued that a qualification to the preceding discussion concerns the possibility that companies may sometimes offer *remedial training* to those employees whose previous training and educational qualifications are deemed insufficient. An econometric study investigating the determinants of three types of training offered by a large US manufacturing firm to its professional employees offers some interesting (although obviously not generalizable) evidence in this regard. The results in the cases of 'core' training and of technical training indicate that these types of training are considered by the firm as career-advancement measures to be awarded to those who stand out relative to their peers. By contrast, employee development training programs appear to be remedial, being targeted at individuals in relatively unskilled low-status jobs.

According to Marimuthu et al (2009) individuals need to enhance their competency skills in order to be competitive in their organizations. The human capital theory within its development, paid greater attention to training related aspects. Therefore, training is an important component of human capital investment. Any activity, improving the worker's quality of productivity is human capital investment. This refers to the knowledge and training persons require and undergo that increases their capabilities in performing activities of economic values. The importance of training is emphasized, which is linked to the longevity of companies with greater tendency to business and economic growth whereas the lack of training of workforce leads to low competitiveness. In turn, a greater stock of human capital is associated with greater productivity and higher salaries and as a source human capital pave a way to generate new knowledge for the economy and society in general. For small businesses human capital is a valuable asset, and positively associated with business performance.

Rizvi (2011) expressed with citations that the rapid development of the human development theory has led to greater attention being paid to training related aspects. Human capital investment is any

activity, leading to the improvement in the quality (productivity) of the worker. Thus, training is an important component of human capital investment. It refers to the knowledge and training persons require and undergo for increasing their capabilities for performing activities, having economic values. Contemporary studies have shown the importance of training. The lack of training of workforce is related to low competitiveness.

Human Capital Effects on Economic Activity

The Relationship Between Human Capital and Firm's Performance

Ballot et al (2001) are of the opinion that human capital exercises its effects on the firm's productivity through following mechanisms: (1) an efficiently organized firm with a manager who has substantial human capital will make better decisions than its rivals with lower human capital; (2) innovation will be stimulated by the quality and training of the personnel in the R&D department; (3) learning-by-doing is also higher if workers have high human capital.

Marimuthu et al (2009) described with citations that human capital importance depends on its degree to contribute to the creation of a competitive advantage. From economic viewpoint transaction-costs indicate that firms gain a competitive advantage when they own their specific resources to which rivals cannot copy. Thus, with the increase of human capital uniqueness, firms have incentives to invest resources into their management with the aim to reduce risks and capitalize on productive potentials.

Abel & Deitz (n.d) asserted that higher levels of human capital in a region could contribute to higher levels of economic activity for several reasons. 1- Human capital increases individual-level productivity and the generation of ideas. By extension, a region having more people with higher levels of human capital should have greater economic activity overall. However, the total effect of higher levels of human capital on economic activity is larger than the sum of its parts. The geographic concentration of human capital facilitates what economists refer to as "knowledge spillovers"—the transfer of knowledge and skills from one individual to another. One person may, through observation and communication, learn skills from another; alternatively, the sharing of ideas among individuals may generate new insights that increase the knowledge of the group. When people increase their knowledge in these ways, they create a secondary pathway that increases human capital, which can further enhance regional productivity, encourage innovation, and promote growth. Studies have shown that regions with higher levels of human capital also tend to have higher wages, more innovation, faster population and employment growth, and greater prospects for "reinvention" as the economy changes over time. Given the impact of human capital on a region's economic performance, it is important to understand which factors help to explain the large differences in human capital levels across metropolitan areas. One such factor is the presence of colleges and universities.

Owings et al (2012) asserted that the Wall Street Journal (May 1, 2010) featured an essay headlined “Education is the Key to a Healthy Economy”. In it, authors, George Schultz, a former U.S. secretary of state and Eric Hanushek, a senior fellow at Stanford University’s Hoover Institute, argued that a nation’s economic future depends, in part, on the human capital which its preschool for 5 year olds through 12th grade (K-12) schools produce. They cited data showing that countries whose students demonstrate higher math and science skills have grown more rapidly than those with lower-skilled populations. Since the quality of education of a nation impacts its long-term economic growth and income distribution, the authors concluded that a country’s improved education system could lead to an improved future. In contrast, without effective K – 12 schools for all children, a country’s economic growth will stall and its economic inequality will increase. The importance of the labor force in economic growth later led to the idea of human capital theory.

Qadri and Waheed (2011) are of the opinion that exogenous as well as endogenous growth theories acknowledge the contributions of human capital to economic growth and the theoretical models predict the role of human capital as a positive contributor of economic growth.

Owings et al (2012) with citations revealed that education in developing countries is both a factor in its economic development and as a human right. Economists have analyzed role of education in economic growth in a variety of ways such as growth accounting without human capital (by Solow, 1956), endogenous growth theory that includes human capital (by Lucas, 1988; Mankiw, Romer, and Weil, 1992), and Total Factor Productivity which empirically considers education’s role on economic growth (by Denison, 1962; Krugman, 1994). Role of education in economic growth has also been analyzed at the micro level. Whatever model economists use strong evidence exists that higher educational inputs increase productivity and result in higher levels of national growth.

Owings et al (2012) stated that some economists concluded that advances in knowledge contributed 23 % of the growth in the U.S. between 1950 and 1962. Education might be a necessary but not a sufficient condition for economic growth. Factors including institutional and governance conditions, an expanding supply of educational capital with no increase in demand, and low educational quality which produces little to no human capital all contribute to education’s impact on a nation’s economic growth. Owings et al (2012) further expressed that education and economic growth modeling has become increasingly fine scale. Over the past decade, empirical growth research has demonstrated that workforce quality – as measured by cognitive skills assessed on international achievement instruments – is significantly and positively related to a nation’s economic growth. Findings affirm that the workforce’s cognitive skills are more important than the mean years of schooling in producing economic growth. What is more, relatively small improvements in the labor force’s skills can have very large impacts on well being of a nation in future. Economies with higher human capital (as measured by workers’ cognitive skills) innovate at higher rates than those with less human capital. This suggests that nations whose workers have greater human capital will see more gains in productivity into the future.

Rizvi (2011) expressed with citations that a greater human capital stock is related with greater

productivity and higher salaries. Similarly, training is linked to the longevity of companies, which in turn is related to business and economic growth. Human capital is a motivating source to workers, boosting up their commitment and creating expenditure in research and development (R&D) and eventually paving way to generate new knowledge for the economy and society in general. Human capital is a precious asset for small businesses, and positively related with business performance. Investments in training are very desirable, from both a personal as well as a social perspective. From the organizational perspective, human capital plays a very significant role in the strategic planning of how to create competitive advantage. It is stated that a firm's human capital has two dimensions, which are value and uniqueness. A firm demonstrates value of its resources when they allow for improvements in effectiveness, capitalization of opportunities and neutralization of threats.

Marimuthu et al (2009) further asserted that investment in training is desirable form both a personal and social perspective. From the organizational level, human capital plays an important role in the strategic planning on how to create competitive advantages. A firm's human capital has two dimensions, which are value and uniqueness. Firm indicates that resources are valuable when they allow improving effectiveness, capitalizing on opportunities and neutralizing threats. In the context of effective management, value focuses on increasing profits in comparison with the associated costs. Firm's human capital can add value if it contributes to lower costs, provide increased performances.

Alani, & Isola (2009) mentioned that Scultz (1961) observed that investments in formal education, health facilities and services, on-the-job training, adult education and migration improve the capabilities of human beings and are therefore avenues for promoting human capital development. Formal education is perhaps the most important avenue for improving the abilities of human beings. It is the form of education given in primary, secondary and tertiary educational institutions. These institutions offer full-time educational programs to their beneficiaries. However, most tertiary institutions of learning organize part-time, evening or sandwich programs for adults who cannot secure admission into full-time programs or combine study with work. One of the major tasks of Education in economic growth and development is the production of skilled human resources for the various sectors of the economy. Apart from performing this quantitative function, formal educational institutions also impart appropriate skills, knowledge and attitudes in their clients. These skills, knowledge and attitudes assist them in coping with the demands of their jobs. This is called the qualitative function of education. It is upon these skills and knowledge gained through formal education that employers of labor build on through on-the-job training. Education also increases the mobility of labor and promotes technological development through science and technology education. Education also raises the productivity of workers through the acquisition of skills and knowledge. Provision of health facilities and services to people in a society is also a way of developing human capital. Health care services increase life expectancy, thus ensuring that workers can contribute to national development for a long time until they reach the retirement age and ensure that the resources invested in them are not wasted as a result of premature death. Health services also improve the strength and vigor of people and guarantee that they remain healthy for productive work. On-the-job training programs organized by employers of labor also remain a vital way of developing human capital.

No matter the level of skills, knowledge and attitudes inculcated in people through formal education, on-the-job training will still fill some gaps in human capital development. Situations always arise for employers to conduct on-the-job training for workers, within or outside the premises of the organization. On-the-job training may become necessary when employees are promoted, when they assume new responsibilities, when the organization notices that there is declining productivity, when there is the need for specialization among workers or when they need additional skills and knowledge to cope with the demands of the job.

Asteriou, & Agiomirgianakis (2001) asserted that educational variables generally act as proxy for investment in human capital. It is widely accepted that the principal institutional mechanism for developing human skills and knowledge is the formal educational system. Most developing countries, now believe that the rapid expansion of educational opportunities is the key to their economic and national development.

Human Capital and Local Economic Development

Abel & Deitz (n.d) in a study about USA mentioned that it has long been recognized that a person's human capital contributes to his or her economic success. While human capital covers an array of knowledge and skills, a college degree represents a significant block of human capital—and one that is easily quantified. Research shows a positive relationship between the share of a metro area's working-age population holding at least a four-year college degree (the most common measure of a region's human capital stock) and its GDP per capita (a standard measure of economic activity). In Flint, Michigan (USA), for example, only 15 percent of the working age population has a degree, and its GDP per capita is roughly \$27,000. Meanwhile, in Boston, where nearly 45 percent of the working-age population holds a degree, GDP per capita is \$66,000.

Germon et al (2011) concluded that human capital is a component of intangible assets of the company. The recent global economic crisis gave rise to the central role of human capital in the sustainable performance of organizations. To remain competitive significance firms must constantly innovate, produce better and be responsive.

Miller & Upadhyay (2000) reported that human capital generally contributes positively to total factor productivity. In poor countries, however, human capital interacts with openness to achieve a positive effect.

Ballot et al (2001) commented with references that human capital has a direct effect on value added as an input, either through a higher direct productivity of educated workers or because of better decisions, organization of work or supervision. Trained workers can also informally train their colleagues in a team. In the same way, technological capital as measured by the value of patents, the cumulated R&D expenditures, etc. can enter the production function since it is a source of innovation and consequently of

value added. This modeling strategy means that the growth of value added can be obtained only by the growth of either human or technological capital. It requires positive net flows of investment. At the aggregate level, the neoclassical endogenous growth model of Lucas 1988 relies on this necessity of an accumulation of human capital. Besides the static effects, there are dynamic effects of intangible capital that might lead to increasing returns. Researchers are a source of continuous innovation and growth and education increase the capacity to innovate and to adapt to new technologies, which means higher diffusion of new technology throughout the economy. This continuous improvement in technology generates productivity growth. A certain level of intangible capital then favors productivity growth.

Bassanini & Scarpetta (2002) asserted that the accumulation of human capital has gained a central role in the recent growth literature. While there is strong theoretical support for a key role of human capital in the growth process, empirical evidence is not clear-cut. On the one hand, micro-economic studies based on human capital earnings functions suggesting significant returns to education. On the other hand, growth regressions have generally failed to find a significant contribution of human capital to economic growth. In particular, the evolution of human capital over time is not found statistically related to output growth.

Simon & Nardinelli (2002) describing the contribution of human capital in cities growth and development opined that cities that start out with proportionately more knowledgeable people grow faster in the long run because (a) knowledge spillovers are geographically limited to the city and (b) knowledge is most productive in the city wherein it is acquired. It is found that city-aggregates and metropolitan areas with higher average levels of human capital grew faster over the 20th century. The effects of human capital were large: a standard deviation increase in human capital in 1900 was associated with a 38% increase in average annual employment growth of city-aggregates over the period 1900–86. The average annual employment growth over the period 1940–90 was of about 15%. Although the rise of the automobile appears to have overwhelmed the importance of human capital in cities dominated by manufacturing early on, human capital seems to have been economically more important in manufacturing cities than in non-manufacturing cities later on. Moreover, the estimated effects of human capital persisted for very long periods of time, suggesting either that adjusting to the steady state is very lengthy, or that shocks to growth are correlated with the presence of human capital.

Germon et al (2011) elaborating importance of human capital in the daily life of the SMEs expressed that there are 19 million SMEs in hugely different sectors in the EU, which are the backbone of economy of the European Union and employ nearly 75 million people. They are at the heart of the economy and induce an important source of knowledge and skills since centuries. SMEs have very interesting assets such as flexibility, responsiveness, speed of action, to meet the challenges of the economic globalization. These assets must be used to implement a comprehensive strategy to protect the intangible capital. Among the facets of intangible capital human capital have an important place in the daily life of the SMEs. This capital, which includes knowledge, know-how, skills, etc., represents a source of riches for SMEs. Germon et al (2011) quoted Stiglitz (2009) besides others who wrote that Human

capital (HC) is a key differentiator for the increase of indicators such as production, quality, and market share. Forgetting the human capital as a factor in the economic performance of a business is a mistake. HC refers to the set of physical skills, like intellectual, an employee contest to economic production.

Human Capital and Economic Growth

Asteriou, & Agiomirgianakis (2001) asserted that on the endogenous growth side of models, human capital accumulation has been recognized as one of the most important engines of economic growth. They mentioned Romer (1990) who developed a growth model, assuming that the creation of new ideas/designs is a direct function of the human capital (which has the form of scientific knowledge). Therefore, investment in human capital, by improving research and development, entails a growth in physical capital investment, which in turn results in higher real growth rates. Persistent accumulation of knowledge by human beings, either with intentional efforts or with learning by doing, promotes the productivity of labor and capital, and is the driving force of economic growth.

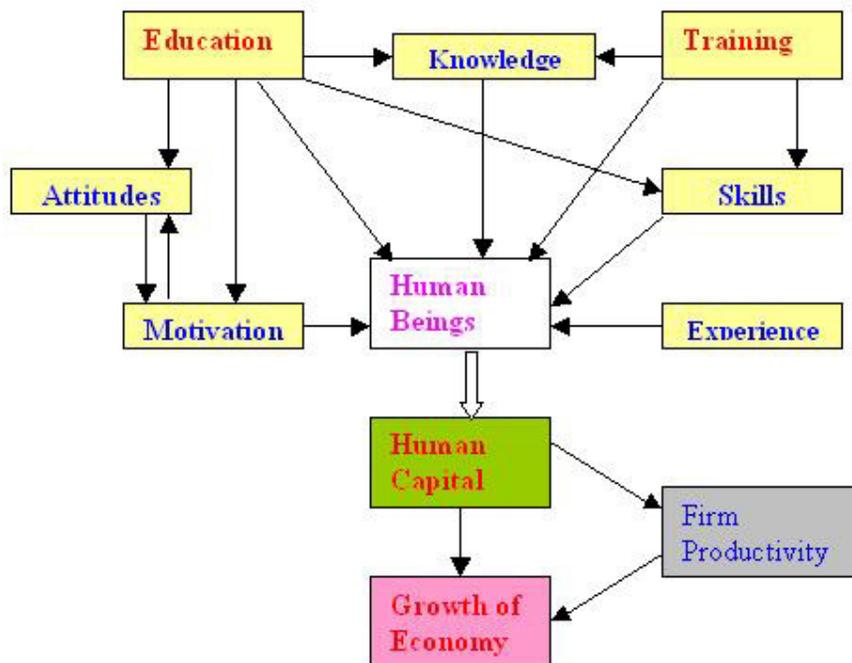
Hoti (2003) expressed that the role of human capital for economic growth is widely recognized in economics literature. Labor force quality has a consistent, stable, and strong relationship with economic growth. The macro effects of human capital, has been analyzed by regressing the economic growth on human capital as well as on other variables. Growth and schooling are highly correlated across countries. Hoti (2003) mentioned results of a study that greater schooling enrolment in 1960 consistent with one more year of attainment is associated with 0.30 percent faster annual growth over 1960-1990. Moreover, human capital accumulation seen from an individual viewpoint explains to a great extent earning differentials among individuals in the labor market. Consequently, the level of human capital is important from both macro and micro aspect. Given these facts, governments throughout the world pay increasing attention to the quality of education delivered by schools. While the progress toward the market economy in the early phases of transition did depend on the willingness and commitment of government to implement reforms, the long run adjustment of the transition economies depends primarily on the ability of human capital to absorb and to exercise the knowledge that is necessary to compete internationally. Human capital, that is able to adjust to technological changes and to the principles of market economy is a prerequisite to bring economic prosperity for the nation as a whole. Moreover, the education system [i.e. human capital] is also vital to wider process of societal change that both under-pins economic reforms and which is needed in its own right, because transition involves the developments of new nations.

Alani, & Isola (2009) stated that human capital refers to human beings who possess skills, knowledge and attitudes, which, are utilized in the production process. Human capital is generally believed to be the most important factor of production, because it coordinates other factors of production to produce goods and services for human consumption. Human capital is the most active catalyst of economic growth and development.

Conclusion

Education and Training affect human beings directly as well as indirectly as: Education Increases knowledge & Skills, Moulds attitudes and enhances Motivation, Training increases Knowledge and Skills and converts it in to human capital which, causes growth of economy directly as well as through firms performance by increasing their productivity. This is shown in the model diagram-1, below.

Diagram - 1 Showing Effects of Education & Training on human beings and converting them in to human capital and effects of human capital on economic growth



Effects → Conversion ⇨

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Corporate governance and its impact on performance of banking sector in Pakistan

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Abstract:

This review study analyzes the impact of corporate governance on determining factors of performance in banking sector of Pakistan. Analysis reveals that how these performance variables are affected by corporate governance. Performance of banking sector is measured through liquidity, profitability, growth, asset quality, operational efficiency, privatization, investor's protection, disclosure; cost of equity; capital adequacy indicator and expense management. This study has been conducted over commercial banks of Pakistan. The empirical results show that there is strong association of corporate governance and determinants of banking sector performance. Results of this study show that banks with good corporate governance show better performance as compared to banks having less corporate governance.

Introduction:

This review paper provides an overview of impact of corporate governance on the performance of banking sector in Pakistan. This paper starts with definition of corporate governance, followed by some variables which determine impact of corporate governance on the performance of banking sector. At the end, chapter concludes some findings and suggestions for further research. Bradley, Schipani, Sundaram and Walsh (1999) criticize old and narrow vision of corporate governance which emphasize on relation between top management and capital providers. A comprehensive definition considers association among different groups in defining the direction and performance of organizations (Markarian, Parbonetti and Previts 2007). According to Shleifer and Vishny (1997: 737).It is a process that deals with methods in which finance providers of an organization guarantee themselves of earning return on investment. Denis (2001) and Denis and McConnell (2003) further

explain this definition;

Corporate governance incorporates the set of organized and market instruments that encourage self-interested managers to maximize the value of the residual cash flows of the firm on behalf of its shareholders (Denis 2001: 192). The set of devices, both institutional and market-based, that encourage the self-interested controllers of a company to make decisions which maximize the value of the company to its owners finance providers, (Denis and McConnell 2003: 1).

Good corporate governance subsidizes to sustainable economic development by augmenting the performance of companies and increasing their admittance to outside capital from financial institutes and individual investors. In emerging markets, for example; China and India, good corporate governance assists a number of objectives for constructing public policies.

It decreases exposure to financial crunches in countries, support property rights, lessens transaction cost and cost of capital and ultimately leads to the growth of capital market.

In Pakistan, the Journal of the SECP Corporate Governance Code 2002 for publicly listed companies of stock exchange has made it a significant area of research of business sector.

The banking sector is considered as back bone of economy in Pakistan, because it consolidates economic accomplishments.

The whole business sector in Pakistan depends on stability of banking sector as banks are major supplier of funds. Performance of banking sector is affected by adverse economic conditions in Pakistan. The determining factors of banking performance are vital and critical to the stability of Pakistan's economy and banking sector. This study is conducted to examine the impact of corporate governance on determinants of banking sector performance in Pakistan. To investigate the impact of corporate governance on performance of banking sector; liquidity, profitability, growth, asset quality, operational efficiency, privatization, investor's protection, disclosure, cost of equity; capital adequacy indicator and expense management are used as variables.

The remainder of this study is arranged as follows. Section 2 describes review of appropriate literature in the areas of corporate governance is discussed. Section 3 concludes the results and findings of this study. Section 4 describes some recommendations for the improvement of corporate governance in banking sector of Pakistan.

Literature Review:

Corporate Governance:

Strong corporate governance stimulates transparency, responsibility and safeguards the interest of depositors. The State

Bank of Pakistan (SBP) has taken numerous procedures in the last four years to put in place and implement good corporate governance practices to recover accountability, internal controls, pellucidity and disclosure standards, guarantee strong inaccuracy and result in a change in the institutional culture. Appropriate and proper tests have been recommended for those ambitious, who want to become Board members, Chief Executives, chief financial officers and top managers of the banks. Movements, which have been taken by the Central Bank (State bank of Pakistan) contrary to those found in destruction of the corporate governance rules, generated a productive and valuable effect on the industry (Hassan, 2006).

Variables:

Profitability:

Net Income:

Net income of the firm includes overall income of firm for the whole fiscal year. Net income symbolizes the net amount of money after all cost of goods, depreciation, expenses, and taxes that have been subtracted from total sales of company (revenue). Net income is also denoted to as the bottommost line, net profit, earnings before interest and tax, or net earnings or income (Khatab, Masood, Zaman, & Saeed, February, 2011). It is very import measure to evaluate financial performance of firm. Net income does not quantify the amount of cash earned during that accounting period. If accounting procedures or depreciation methods are changed during the year, it has great influence on net earnings, but in some cases these alterations in procedures have low impact on real operations of company. A change in net income is an important factor in different financial analysis. If EBIT of a bank is below average or extremely low, it can cause many problems; such as, decreasing number of customers, insufficiencies in managing expenses of company and critical accounting procedures. Some banks attempts to show minimum net income in order to minimize their tax expenses (The Profitability Of Financial Institution)

Bank Interest Income:

Bank interest is measured through two type of modeling framework.

1. Dealership approach
2. Micro model of banking industry approach

Bank is consider as dynamic dealer according to study. Bank set up interest rates on advances and deposits to make balance of irregular demand for loans and deposits by customers. Bank considers its interest rate as a fee charged to maintain liquidity of bank up to certain limit.

It is the financial measure for a bank.

Second approach is micro model of banking firms, according to this study bank is a stagnant, which set demand and supply of advances and deposits instantaneously.

Interest income can be calculated by subtracting interest expenses from interest income on assets, or interest earned by the bank on assets minus interest paid by the bank on liabilities.(The Profitability Of Financial Institution)

Return on Equity:

It is the amount of net income returned as a percentage of shareholder's equity. Dividend is paid to stockholders after paying dividend to preferred stock holders. Equity by shareholders does not consider preferred stock. It can also be called "return on net worth".

It measures profitability of company by evaluating that how much income a corporation earns with the capital contributed by shareholders. It is represented in term of percentage.

It is calculated as;

Return on equity= Net income/ Shareholder's equity (Khatab, Masood, Zaman, & Saeed, February, 2011).

Asset Quality Indicator:

Return on Assets:

It is a determinant of profitability of performance in relation to total assets. It measures the performance of bank, as how efficiently they are managing their assets in generating income. It is calculated by dividing total income of bank by its total assets. It represents income earned on assets in term of percentage. It can be referred as return on investment. Some investors add back their interest expenses into net income, which has been deducted from income, because they want to use operating income before cost of finance (Khatab, Masood, Zaman, & Saeed, February, 2011). It gives view of bank's performance as how proficiently they are transforming their investments into profit. Non-Interest earning assets of bank include, cash, non-interest earning deposits with other banks and other non-interest assets. The higher ROA is better for bank, because it shows that bank is earning more profit on less income(The Profitability Of Financial Institution).

Operational efficiency indicator:

Non-Performing loans:

Loan default and non-performing loans are major reason of bank's poor performance. Pakistan has made great improvement in managing these loans. SBP has manages to recover large proportion of non-performing loans. These regulations by State banks

increase credit limits. Due to inflation control, interest rate was stabilized, so banks attract more deposits. Agency problems aroused due to inefficient credit risk management. Highly skilled and efficient management is required for risk management and to avoid crises in banking sector. SBP introduced policies and guidelines for corporate governance in banks in the start of 2002 (Ahmed M. Khalid M. N., 2005). The banks that were distressed with a massive volume of non-performing and defaulted loans have cleaned up their balance sheets in an open, transparent and across the board manner. The stock of gross non-performing loans (NPLs) that amounted to 25% of total advances of the banking system and DFIs has been reduced to 6.7% by December 2005. More than two-thirds of these loans are fully provided for and net NPLs to net advances ratio has letdown to as low as 2 percent for the commercial banks. The quality of new loans distributed since 1997 has improved and recovery rate is 97 percent despite introduction of new products such as consumer finance (Hussain, 2006).

Privatization:

Liberalization or privatization helps banks to meet global challenges. Privatized banks adapted themselves to new challenging and competitive environment. Governance of banks changed due to privatization and restructuring of banks. These changes cause deregulation, advancement in technology and freedom in banks (Abid A. Burki, 2007). Government owned banks defaulted to the increase in non-performing loans {(Patti and Hardy (2005) and Ataullah et al. (2004)}. State bank of Pakistan introduced new economic reforms to cover economic inadequacies. The main reason of introducing these regulations is to reduce inefficiencies of banking sector. Privatization of Pakistani banks started in 1991, when MCB sale its 26% shares to private companies, 50% shares offered to general public and remaining stock was sold in 2001-02. ABL handed-over its 26% shares to its employees. UBL privatized in 2002, by taking consortium from Abu Dhabi and Bestway Groups. Proportion of privatized banks increased up to 70% in 2005. UBL face liquidity shortfall due to increase in managerial expenses. HBL was also provided support by government to meet liquidity needs. Privatized banks show good performance as compared to government owned banks. Privatized banks may loss efficiency in short term, but ensure good performance in long run (Abid A. Burki, 2007).

Capital Adequacy Indicator:

Capital adequacy ratio is set by regulatory authority of banks. This ratio is used to check the position and performance of banking sector. This ratio is compulsory requirement on banks imposed by state bank of Pakistan. The basic purpose of this ratio is to make sure that banks are capable of bearing normal losses. State bank control these ratios to protect the interest of bank's customers. This ratio is beneficial both for the bank and its customers. This ratio checks the ability of banks to meet their obligations and all type of risk, such as; market risk, credit risk, business risk and others. A major part of capital adequacy ratio is alternative capital cost. Return on Equity is an appropriate method to measure and analyze the alternative cost of capital.

In case of low cost of capital, banks can retain more than regulatory amount of capital, as it does not affect the sustained profitability. If the rate of alternative cost of capital increases, amount of retained capital tends to decrease. Deposited funds by customers of bank also determine the capital adequacy ratio. Deposits have low cost of finance as compared to bonds and loans ((Kleff & Weber, 2003). If the amount of deposits decreases, it will tend to increase the cost of debt financing through other sources. If the cost of debt increases, profit margin of bank will tend to decrease, so bank require more funds to reimburse deficit of profitability. The capital of previous period is main variable which defines adjustment cost. If the company retain large amount of capital, it will affect profitability, productivity and cost effectiveness of bank's operations. But if company has insufficient capital, it will negatively affect the profit margin of bank. So bank should maintain higher level of capital in comparison to minimum obligation by regulatory body.

Regulatory requirement is also an important factor that mainly contributes to capital adequacy ratio in banking sector. CAR set by the state bank is compulsion for all banks with minimum ratio. In CAR, regulatory pressure by state bank is an important factor. In some countries, CAR is set by some agencies and controlling authorities.

Capital Adequacy Ratio is also explained in term of economic growth. In case of boom period, banks retain low ratio of capital due to low risk and make more in other financial institutes to increase their profit margin. But in case of recession period, banks need high amount of capital due to high risk and uncertainty to cover unexpected economic crisis.

Banks retain certain amount of capital because it performs the function of shock absorber in case of economics loss. It decreases the chances of bankruptcy and saves the cost of liquidation of bank. State bank of Pakistan sets minimum ratio for capital adequacy. It does not completely reveal the risk faced by the banks, but it affects the decisions of banks related to capital ratio and financial risk which is caused due to the loss of contract value. In banking sector, risk can be measured through risk weighted assets/total assets. Risk encountered by portfolio and capital adequacy ratio has inverse relationship. Capital adequacy ratio set by the state bank depends on the size of bank and risk level, so calculation of risk weighted assets may vary from bank to bank according to the current procedure of Base II and guidelines of state bank of Pakistan (Bokhari & Ali).

Expense management:

The government of Pakistan has decreased tax rates for banks from 58 percent to 35 percent in last few years and maintained it at equitable value with general corporate tax liability. This decrease in tax rate increased profit margin of banks. Banks cover

their previous massive losses and earn profit in billions (Nawab, 2012). Taxation is defined as taxes over the operating income before tax. Banks construct their portfolio in order to reduce their taxes. There is positive relationship between variables of tax and profitability of bank. Bank can increase its interest rate to cover the cost of taxation from its customers (Khan, Anuar, & Khan, 2011)

Cost of equity:

Cost of equity is measured in term of different models by different researchers. It can be measured in term of EPS and EPS growth model (Ohlson and Nauroth (2005). They designed a model which is associated to firm's price per share, with coming year's expected EPS, and short term growth in EPS. Studies related to CAPM are based on individual investment returns {Lintner (1965) and Douglas (1969)}. Corporate governance identifies the effects of corporate governance on capital liquidity and banks with opaque information and disclosure suffer from economic loss of liquidity Chen, et al (2007). Corporate governance reduces agency cost and positively affects capital liquidity Ashbaugh, et al (2004). Proper disclosure of financial statements reduces cost of capital and protects investor's interest. Pakistan's legal protections help to reduce cost of equity (Chen, et al (2004). Earning of shareholders on equity is measured in term of return on equity. If return on equity increase, investor's interest is protected and risk lowered. Increase in number of assets determines size of bank. Larger banks have secure investments, so investors will be willing to invest even at lower interest. Size of firm is negatively related to cost of equity. EPS has negative relationship with Cost of equity and positively related to corporate governance. A larger board size in a bank reduces cost of equity, so it is negatively related to cost of equity. If managerial ownership increases in a bank, cost of equity will reduce, because low authority of board will reduce agency cost, minimize risk, so cost of equity will decrease (Butt, 14 : 1 (Summer 2009)).

Growth:

Banking sector experienced growth in assets and liabilities in 1989-1996 both in privatized and state owned banks, but this growth slowed down after 1997. In this era of growth, privatized bank's assets grew by annual rate of 37.06% and in state owned banks this rate was 24.68%. Growth in asset and liabilities of privatized banks was greater than state owned banks. Slow growth of assets in privately owned banks without increase in cash flows describes the reason of decrease in return of cash flows (Cornett, Guo, Khaksari, & Tehranian, October, 2005).

Increase in growth and size of bank help to avail good market opportunities, economies of scale, scope and market empowerment. A growing bank require large amount of financing. It can adopt better governance practices to reduce cost of capital. A growing bank requires more corporate governance, because managers and board of directors believe that good governance will help to raise more funds from investors (.Javid & Iqbal, 2010).

Financial Disclosure:

Corporate governance has ensured timeliness and excellence of financial disclosure of banks in last few years. SECP has increased its monitoring by issuing new codes. Disclosure of all financial and non-financial items is required by rules and

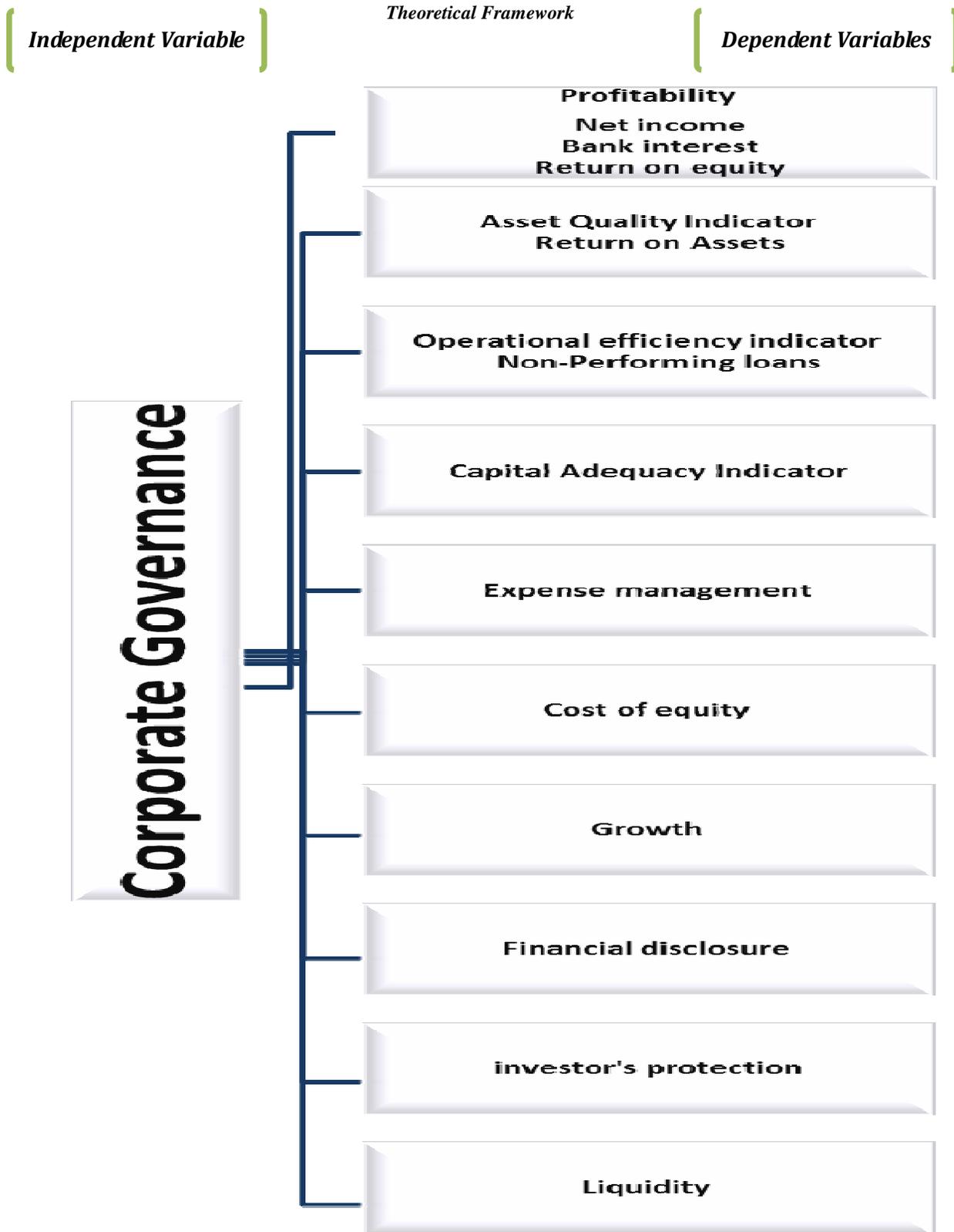
regulation. SBP requires complete disclosure of financial statements of banks. Shareholders, who have more than 10% of capital, must fully disclose their proprietorship. SECP has recently issued some guidelines for companies related to disclosure and pricing. Auditors are bound to certify that companies have used valuation practices and procedures properly. Institute of Chartered Accountants is an important element in restructurings of corporate governance in Pakistan. SBP has maintained an approved list of auditors, who have selected for banks. SECP controls and regulates the accomplishment of auditing and reporting standards (WorldBank, June 2005).

Investor's Protection:

Banks are registered through CDC, so investor's rights are protected. Stockholders can demand full information from company. They can participate in annual general meeting. Shareholders have right to elect or remove board of directors. All critical decision about company requires shareholder's approval, such as, sale of company's assets and increase in authorized capital. Decisions are passed by majority of shareholders in case of investment in associated companies. According to law, shareholders cannot vote by post or e-mail. The tight control of SBP on banks helps to avoid agency problems. In Pakistan, some families are dominated over annual general meetings of banks and board of directors is not responsible to shareholders in Pakistan. Concentrated control of board of directors decreases the power of minority shareholders. (WorldBank, June 2005)

Liquidity:

It measures the cash position of bank. Liquidity is the ability of a bank to convert its short term securities into cash within one year to pay its liabilities. In crisis countries; like Pakistan, loan to deposit ratio is greater in state owned banks than privatized banks. State owned banks finance their loans by acquiring funds and equity as privately owned banks. There is less liquidity in crises countries, because their operating performance level is lower than private banks. The countries, where government is highly involved in banking system; for example, highly authorized State bank in Pakistan, state owned banks are less liquid as compared to privately owned banks (Cornett, Guo, Khaksari, & Tehranian, October, 2005).



Conclusion:

The relationship between corporate governance and performance of banking sector in Pakistan has been deeply analyzed. To investigate the impact of corporate governance on performance of banking sector; liquidity, profitability, growth, asset quality, operational efficiency, privatization, investor's protection, disclosure, cost of equity; capital adequacy indicator and expense management are used as variables. Corporate governance is positively associated with profitability indicators in term of net income, bank interest income and return on equity. Corporate governance is directly related to net income, interest earned by bank and return on equity as good governance provides instruction to increase income and earnings on equity; EPS. Liquidity is positively correlated with corporate governance, as good governance can provide guidelines to increase current assets of bank to meet short term liabilities. Good corporate governance provides recommendations to avail growth opportunities in the market, so it is positively related with growth of a bank. Performance of a bank can be measured in term of quality of bank's assets. This indicator measures the performance of bank in term of effective utilization of its assets. Good corporate governance helps to improve the quality of assets, so a positive relationship exists between them. Operational efficiency of a bank can be evaluated in term of amount of non-performing and default loans. This efficiency measures the ability of a bank to effectively manage its non-performing loans. Good governance helps to efficiently manage non-performing loans of a bank. So there is positive association between corporate governance and operational efficiency of a bank. Privatization can be used as performance indicator in banks. Privately owned banks have better corporate governance as compared to state owned banks, so there is direct and favorable relationship between privatization of banks and corporate governance. Investor's protection measures the performance of a bank in stock market. Corporate governance maintain a check and balance on bank's management to protect the rights of shareholders, so results document a positive association between corporate governance and investor's protection. Accountants and financial managers have pressure from corporate governance to disclose all facts and figures in financial statements to avoid any mistake or fraud. Corporate governance favorably impact full financial disclosure of a bank. Cost of equity can be measured in term of EPS. It decreases as EPS increase, so both are negatively correlated. Good corporate governance of a bank helps to increase EPS, and reduce cost of equity. Corporate governance is negatively associated with cost of equity in a bank. Capital adequacy ratio is ability of a bank to bear normal losses, meet short term and long term obligations and certain risk level; which can be market risk, credit risk and business risk. It is measured in term of money which is retained in a bank to compensate liquidity problems. Good corporate governance provides guiding principle to

a bank to maintain certain ratio of capital reserves to bear liquidity risks, so there is favorable relationship between good corporate governance and capital adequacy ratio. Expense management measures the ability of a bank to effectively manage its expenses to increase profit margin. Efficient corporate governance of a bank provides guidance to reduce tax expenses by using different accounting procedures. Good corporate governance is directly related to expenses management of a bank. All these determinants have significant impact on performance of banking sector. This review study shows that Pakistan's banking sector is well established. Banks have good corporate governance to improve their performance and maintain the interest of shareholders. . All banks are performing well by maintaining their profitability, liquidity and continuously growing.

Recommendations:

- It is recommended that further research should be conducted to determine that whether Pakistan board is effectively controlling the direction of business and supervising management.
- SECP should encourage establishing Compensation Committee of the board. Remuneration plans should be highly technical and based on performance of executives.
- It is recommended that Pakistan should develop its resources of competencies in corporate governance. The principles of Corporate governance should be included as subject at graduate and post graduate level (ACCA, PICG, & SECP, 2007).
- Accountability of board of directors should be increased to ensure smooth performance WorldBank. (June 2005).

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Integrated model of Social Media and Customer Relationship

Management: A Literature Review

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Abstract

Global economy has transformed into somehow like a small town marketplace, where community buzz fixes on whether businesses prosper or not. A study showed that companies that used social networks got a huge return on that investment in 2010. This study also revealed that, 72% respondents plan on linking data from social networks to their CRM software within next year. Integration of Social Media (SM) and Customer Relationship Management (CRM) is imperative for organizations in conducting business. Albeit it is a new concept towards many business, but, as the implemented firm's growing market share and improving performance creates it as a lucrative business strategy. Forming SMCRM ensures firms' effectiveness and efficiency in their day to day operations. So, in parallel to the introduction of SMCRM in the business arena, researchers also attract towards this concept to conceptualize on their own language and try to find out more and more opportunity.

Key words: SM, CRM

1. Introduction:

In today's business world, Social Media (SM) and Customer Relationship Management (CRM) are the most catchphrases. Now a days, these are essential in business operations at a great pace. Albeit Customer Relationship Management is much familiar in the business world from the developed economic country to underdevelopment country, the term Social Media in a business is a new concept towards many people.

In matter-of-fact, Customers are the imperative and mostly concerned part of business. So customer relationship management is very important to business. Good intimacy with customers leads to operational excellence of organization (Treacy and Wiersema 1993). Social media proffers a prevailing opportunity to connect with those customers on a more personal level. Layering social media in customer relationship activities can accelerate company's performance and build a much tighter relationship – resulting in more opportunities to communicate with clients outside formal processes and build community (Karr 2011). In this way, global economy has transformed into somehow like a small town marketplace, where community buzz fixes on whether businesses prosper or not. A study conducted by SugarCRM⁴⁰ showed that companies that used social networks got a huge return on that investment in 2010 (Blankenhorn 2011). This study also revealed that, 72% respondents plan on linking data from social networks to their CRM software within next year (As cited earlier). Over 80% of growth in enterprise use of social networking tools to driven by customer engagement projects in 2010 (Shane 2010). So from this research finding, it is said that, integration of Social Media (SM) and Customer Relationship Management (CRM) is imperative for organizations in conducting business. Albeit it is a new concept towards many business, but, as the implemented firm's growing market share and improving performance creates it as a lucrative business strategy. Gartner⁴¹ predicted that, social

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¹ a commercial open source provider of CRM software in Cupertino, California.

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¹ **Gartner**, Inc. is an information technology research and advisory firm headquartered in Stamford, Connecticut, United

media will be a supportive tool among 40 percent of top 1000 companies in social collaborative customer action to improve business services and processes (Neptune 2011). Forming SMCRM ensures firms' effectiveness and efficiency in their day to day operations. So, in parallel to the introduction of SMCRM in the business arena, researchers also attract towards this concept to conceptualize on their own language and try to find out more and more opportunity. Existing researchers' contribution toward this sector paved the way to go for further research.

This paper contains a literature review about SM, CRM, and integration between SM and CRM which is referred here as SMCRM.

2. Social Media (SM):

2.1 Different school of thoughts of SM: It is interesting to define Social Media from multi perspective dimensions of several authors, websites create a combined image about what actually social media means. It is imperative to define SM from multi perspective will formulate a pictorial representation of this concept. Basically SM is not just a composition of some social networking sites or some interlinked or interconnected sites, it has already exit this simple concepts. Golden (2011) divided the phrase "Social Media" and labeled "Social" and "Media" as "Relationship Aspect" and "Communication Vehicle" respectively. Here the study represent different schools of thought regarding SM are underneath below,

Technological perspective definition of Social Media (SM) has connoted by several authors which primarily focus on the combination of some particular social media technologies. Susan Ward, Ron Jones, Joe Cothrel, Gini Dietrich, and Rebecca Lieb defines social media as an online media which is more specifically connoted by Ann Handley is that it is a connective tissue and neural net of the Web. Robert scoble defined social media just plainly an Internet media. Social media involves social-media technologies (Anthony J. Bradley, WIKIPEDIA, tvb.org, Joe Cothrel, Joe Pulizzi, Deborah Weinstein) particularly web-based and mobile technologies (Wikipedia, Kaplan & Haenlein, Lieb). These technologies are integrated into same umbrella which is called social media (Anvil Media, Odden).

General user perspective definition of Social Media (SM) has presaged about the user concern. Kaplan & Haenlein, Lazworld, Cothrel, Decker, Fou, Odden, Petersen, Strauss, Weinstein focus their idea about SM which ensures user participation and contains user-generated content. It is firm connection between peoples who participate (Comm 2010). Then the next question comes to mind about what actually general users of SM do here. Dietrich, Falkow, Greenstein, Kerpen, Moran, Odden, Pennington, Petersen, Schottmuller, Sterne, and Strauss say that, users of SM mainly use to share opinions, insights, experiences, and perspectives with each other. How they share? By talking, participating, sharing, networking, and bookmarking online (Jones', Bottle PR and Weinstein). Ward, Dietrich and Eisenberg identify differences with traditional media, which delivers content but doesn't allow readers/viewers/listeners to participate in the creation or development of the contents.

Information and communication related to business users perspectives have a particular definition of Social Media (SM), albeit it is very much similar with general user perspective. Cohen, Decker, Falkow and Handley define that both individuals and businesses accelerate their information and communication needs through Social Media (SM). Business uses SM as transparent, engaging and

States. It was known as **GartnerGroup** until 2001 Research provided by Gartner is targeted at CIOs and senior IT leaders in industries that include government agencies, high-tech and telecom enterprises, professional services firms, and technology investors. Gartner clients include large corporations, government agencies, technology companies and the investment community. The company consists of Research, Executive Programs, Consulting and Events. Founded in 1979, Gartner has over 4,300 employees. Gartner uses hype cycles and Magic Quadrants for visualization of its market analysis results. (<http://en.wikipedia.org/wiki/Gartner> accessed October 7, 2011).

interactive form of public relations (Buyer and Kleinberg). It may also connoted Peer to Peer (P2P) communication (Buyer, Cohen, Garrett, Moran, Weinstein) and Two way web (Brogan, 2010) .Chmielewski, Cohen, Dietrich, Hofstetter, Moran, Odden connotes about directions of business at any time, by any possible (digital) means, that is, through megaphone (Hofstetter) . social Media uses “Wisdom of Crowds” to connect information in a collaborative manner (Evans 2008). Schaefer (2011) proposed three hallmarks of socialmedia: Evolution, Revolution and Contribution. First, it is an evolution of how people communicate, replacing email in many cases. It’ s a revolution: For the first time in history people are able to free, instantaneous, global communication. Third, social media is illustrious by the ability of everybody to share and contribute as a publisher. Owyang (2008) stated about the way the organization can adopt social media by tire (decentralized) – tower (Centralized or Command) – the hub and spoke (Center of excellence).

Marketing perspective definition of Social Media (SM) has connoted by Burgess, Clayman, Fou, Kleinberg, Moran, Pulizzi & Shankman. From their definition regarding Social Media (SM) it is found that, Social Media (SM) is a new marketing tool , important for income generation and promotion of branding . Erica Nicole (2010) defined Social media is a cost-effective and powerful brand extension. Facebook, Twitter, blogs, YouTube are user-driven (inbound marketing) channels defined by Burgess, Cothrel and Kleinberg.

Specialists in this sector like, Stacey Acevero who is a social media community manager at PRWeb stated, “More and more companies are moving towards using social media as a customer service platform because it provides one more way for them to connect with their communities,” (Neptune, 2011).

From above school of thought regarding Social Media (SM), Marketing perspective thoughts are concerned Social Media (SM) as an integral part of Business marketing. This school of thought accelerates the integration with Customer Relationship Management (CRM).

2.2 Types of SM: Kaplan and Haenlein (2010) explained six different types of social media. These are, collaborative projects (e.g. Wikipedia), blogs and microblogs (e.g. Twitter), content communities (e.g. Youtube), social networking sites (e.g. Facebook), virtual game worlds (e.g. World of Warcraft), and virtual social worlds (e.g. Second Life). Technologies include: blogs, picture-sharing, vlogs, wall-postings, email, instant messaging, music-sharing, crowdsourcing, and voice over IP, to name a few. Many of these social media services can be integrated via social network aggregation⁴² platforms.

2.3 Key Elements of SM: Mayfield (2008) identified five key elements of social media: participation, openness, conversation, community and connectedness. Descriptions are given below

Participation: Social media persuades contributions and feedback from everyone who is interested. It shapes the line between media and audience.

Openness: Most social media services are open to feedback and participation. They egg on voting, comments and the sharing of information. There are very few barriers in accessing and making use of content – password-protected content is frowned

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¹ **Social network aggregation** is the process of collecting content from multiple social network services, such as MySpace or Facebook. The task is often performed by a social network aggregator, which pulls together information into a single location or helps a user consolidate multiple social networking profiles into one profile. (http://en.wikipedia.org/wiki/Social_network_aggregation accessed October 10, 2011)

on.

Conversation: Compared to Traditional media, Social media is better, because it allows two-way conversation.

Community: SM allows communities to form quickly and communicate effectively. Communities share common interests, such as a love of photography, a political issue or a favourite tv show.

Connectedness: Most kinds of social media thrive on their connectedness, making use of links to other sites, resources and people.

2.4 Calculation of SMROI: The abbreviation of SMROI is Social Media Return of Investment (ROI). Business is very much interested to calculate ROI⁴³ of their investment. In this case, if a corporation invest their capital towards Social Media then they will also measure ROI to prove the SM effective. Steps to calculate SMROI followed by Evans (2011)⁴⁴ are underneath below,

Step One: Assemble client's financial data and Draw a timeline

Step Two: Track and measure the social media activity .e.g., number of mentions or interactions.

Step Three: Layer the financial data from step one, and the social activity from step two. Put them on the same timeline. Look for patterns and isolate them. Then prove or disprove a correlation between revenue and social media activity.

2.5 Top 20 SM platform: In the *YFS Magazine* (December 6, 2010) Erica Nicole posted a list of top 20 social platforms which is used on business perspectives. The list are underneath below,

Video Sharing Sites (YouTube, Vimeo)

Blogs (Blogger, WordPress)

Content Management Systems (Pligg)

Email Newsletter Campaigns (MailChimp)

Facebook Groups or Pages

Facebook Apps (Twitter integration)

Social networks and networking tools (Linkedin, Myspace, Foursquare)

Mobile Application Development

Twitter or other forms of microblogging (Tumblr, Posterous)

News sharing and social bookmarking sites (Digg, Reditt)

Virtual Worlds (Kaneya, Smallworlds, Meez, SecondLife)

Augmented reality (Worksug, Mobile App)

Photosharing (Flickr, Picasa)

Content sharing sites (Scribd, Slideshare, Delicious)

Social media press reelease (PitchEngine)

Crowdsourcing or Wikis

Forums

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¹ ROI measures the overall effectiveness of management in generating profits with the available assets. (Khan & Jain, 2008)

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¹ For Graphical presentation, see Appendix A

Real world events organized via social media (Tweetups)

Customer service sites (Yelp, ePiniion)

Podcasting

To use successfully SM in business operations, McKay (June 10, 2009) mentioned Faris Yakob⁴⁵'s five step of successful SM are, Listen, respond, Nurture, Create social objects, Be transparent. He also mentioned Paul Worthington five tips for social media activity, Listen, Be comfortable with ambiguity, Filter through your purpose, Influence, don't control and Be generous.

3. Customer Relationship Management (CRM):

Sheth and Parvatiyar (1992) had observed that customer relationship had developed since pre industrial days. The origin of the term CRM can be marked out in the eighties of the last century (Kotler et. Al 2001). Its importance in industry was first realized by Hakansson (1982) and the term relationship marketing was first used by Berry (1983). Since the mid nineties, relationship marketing turned into Customer Relationship Marketing and many IT vendors started to market their products as CRM systems (Vogt 2008). Mathena et.al (2009) showed an evolution of CRM which started from a single customer to turn as an application framework and encompass other business relationships.

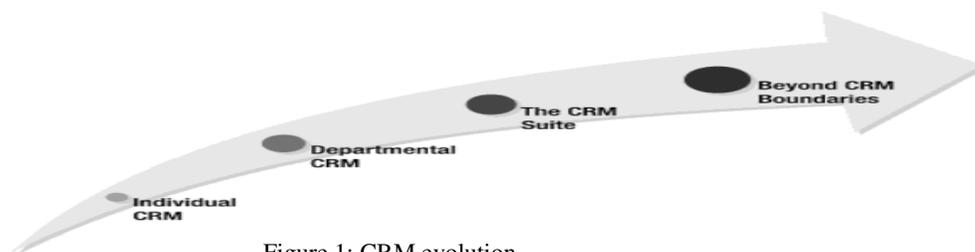


Figure 1: CRM evolution

Description: Adapted from Justin Mathena, Aaron Yetter, Hoss Hostetler 2009, Success with Microsoft Dynamics CRM 4.0: Implementing Customer Relationship Management , *Apress* p-4

CRM as a part of the business strategy is designed to ensure profitability, revenue and customer satisfaction (Gartner Group 2002). Through this strategy, organization focuses to turn themselves as a customer focused organization (Garett 2000). It is a management approach to create, develop and enhance relationship with targeted customers (Payne 2001). With this management approach business tries to create superior value for both themselves and for customers (Sheth & Parvatiyar 2001, Rai 2008). It is not confined only within the marketing department rather it should be treated as organizational strategy and should be actively involve every part of organization (Little and Marandi 2003). This strategy should also properly managed otherwise it will just be a drain on shareholder value (Stone & Foss 2001).

It is also termed as integrated business process combined with sales, marketing, services and so on to handle transaction with customers in an organized way (Rutenbeck & Blaine 2006).

CRM is also viewed as a philosophy of business which denotes organization truly believes in the customer or not (Stone & Foss 2001). It is a philosophy which is supported by technology and system to improve human interaction (Greenberg 2004).

From the IT perspective, it is a technology driven solution on managing information flow between the buyer and the seller

(Schultz 2000). It software enables company to calculate loyal customers in order to profit generation (Little and Marandi 2003). It is technology based customer solution (Beck 2010).

Gartner Group (2000) identifies three segments of CRM namely operational, analytical and collaborative (Vogt 2008) whose compose the CRM ecosystem (Rajola 2003). Operational CRM covers customer facing transactions from the internal company (Greenberg 2004). Analytical CRM captures data related to customers from plethora of sources and interpret data as per needed obligation (Greenberg 2004, Vogt 2008). The third one, that is Collaborative CRM, which could be customer relationship program or customer interaction center that provide channels to establish contact with customers (Vogt 2008). According to Vogt (2008) the definition of Bartmann (2003) covers all dimension of CRM. The definition is underneath below,

“CRM is a holistic strategic approach to a customer oriented enterprise. Main components are next to the definition of the CRM strategy, the resulting design of customer relationships, the conception of processes and the implementation of the appropriate IT systems and technologies (Bartmann 2003, Vogt 2008).”

Many of among writers regarded the definition provided By Gartner Group (2000 , 2004) is sophisticated and very much practical (Stone & Foss, Sheth & Parvatiyar, Rajola, Little & Marandi, Greenberg, Vogt, Peelen). This definition are underneath below,

“CRM is an IT enabled business strategy the outcome of which optimize profitability, revenue and customer satisfaction by organizing around customer segments, fostering customer satisfying behaviors and implementing customer centric processes.”

3.1 Components of CRM: According to Judith W. Kincaid (2003) there are four components of CRM which are underneath below,

Information which is the raw materials of CRM

Process, which is often referred to as Customer centered processes are the product of CRM.

Technology is the machinery that enables CRM to work.

People are labeled as power supply of CRM.

3.2 Tools of CRM: In their book “Relationship marketing management (2003)” Little and Marandi listed some tools that embrace CRM of a particular company.

- **Websites (e-CRM)**
- **Call center(s)**
- **Sales force**
- **Customer service and help desk**
- **Point of sale terminals**
- **Voice response systems**
- **Mobile communication devices (m-CRM)**
- **Service history**

➤ **Analytical and predictive modeling**

➤ **Smart cards**

3.3 CRM Cycle: Rai (2008) proposed a CRM Cycle which are underneath below.

- Obtaining information from customers
- Creating superior customer value
- Building loyal customers
- Acquisition of new customers
- Working towards increased profitability

CRM revolves around the Customer life cycle management which are shown below,

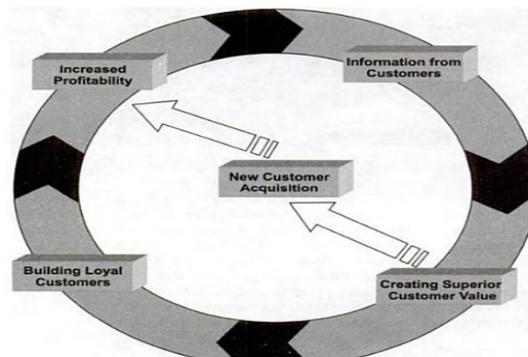


Figure 2 : Customer Life Cycle Management

Description: Adapted from Ahooja, V. 2001, Changing pattern of e-CRM solution in the future. CRM: Emerging tools concepts and applications Tata-McGraw Hill, New Delhi, p-94

In short, CRM is a business system or systematic approach of aligning process and technology in the customer life cycle management (Rajola 2003).

3.4 Stakeholders in CRM: In his book “Customer Relationship Management: Concepts and Cases (2008)” A.K. Rai expressed that, there are four principle stakeholders who play a major role in CRM’s entire process which are underneath below,

Customers are imperative in CRM design for whose delight the whole exercise is conducted.

Employees situate in the execution part of CRM design. Span of such employees ranging from frontline staff to the top management.

Suppliers are the stakeholders of company who delivers vital input to a company’s value chain.

Partners are the creator of additional value to the customers.

4. Integration of Social Media and Customer Relationship Management (SMCRM):

SMCRM is a concept which refers to the integration between Social Media and Customer Relationship Management. The formation of SMCRM is the integration of Social Media strategy into the Customer Relationship Management. In a publication entitled “CRM and Social Media: Maximizing Customer Value” Avanade⁴⁶ (2008) noted that this integration will

- Increase the quality and quantity of interactions with customers, suppliers and partners.
- Boost company's reputation and overall brand loyalty.
- Improve the feedback loop between company and customers.
- Leverage new forms of media
- Get a step up from competitors.

This integration can improve information accuracy, reduce manual effort, and provide more in-depth customer insights (McKay 2011). To analyze its imperativeness Info-Tech⁴⁷ (2011) provides some recommendations which are underneath below:

- Social media is an add-on to existing channels.
- Consider it as another medium in communicating with customers.
- Integrating social media and CRM technology is essential to achieving goals.
- Information technology is essential in managing social media infrastructure and security.
- Consult best practices and current real-world implementations.
- A social media implementation should be in line with enterprises' plan and strategy.
- An effective social media plan is built in stages.

Postman (2009) refers this convergence as socialprise. With the implementation of SMCRM, a corporation can identify who is an influencer towards their business (Powel et al, 2011). SMCRM provides Customer dialogue front end, Social Dashboard, Centralized moderation and Auditing which allows sales force of a corporation to get closer to customer (Wollan et al, 2011). SMCRM endows with an enormous opportunity to enrich customer interactions and paves a way to manage and measure successfully use of social networking in customer engagement. Social networking is a “disruptive influence” on the CRM market

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¹ **Avanade Inc.**, a subsidiary of Accenture LLP, is a multinational IT consulting and software company that develops business software from a Microsoft products platform. Founded on April 4, 2000, Avanade is atypical amongst many systems integrators such as IBM and EDS in that Avanade's services are specialized to the Microsoft software platform. Headquartered in Seattle, Washington, the company had 9700 employees in 34 countries at the close of its fiscal year 2009. Avanade has 4,000+ badged staff located offshore in India, the Philippines and Slovakia who work in Accenture-owned delivery centers as part of a global delivery network spanning six cities in India and one in the Philippines. (<http://en.wikipedia.org/wiki/Avanade>)

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¹ **Info-Tech Research Group** (Info-Tech) is an information technology research, analysis and consulting firm. Info-Tech provides businesses with independent expertise in strategy, planning, implementation, optimization, management, staffing and education. Info-Tech is headquartered in London, Ontario, Canada with a branch office in Toronto. President and CEO Joel McLean founded Info-Tech in 1998 and the company now serves more than 21,000 clients globally. (http://en.wikipedia.org/wiki/Info-Tech_Research_Group accessed October 14, 2011)

which challenges companies to innovate and adjust (Metz, 2008). In a *White Paper* entitled “CRM and Social Networking: Engaging the Social Customer” (July 9, 2009 p-4) of Microsoft Dynamics CRM, there are some strategies which can help organizations in the better leverage of SM with the overall CRM strategy:

- Treat social networking as a new channel within CRM
- Enhance and extend CRM through social networking.
- Play to the strengths of both CRM and social networks. Use CRM and social networking sites together to better listen to customers, analyze information, and respond to customers in a way that’s meaningful to them.

Organizations that are using SM in their CRM activities mainly have no clearcut plan, said Altimeter Group. So to help in preparing plan and strategy, The Altimeter partner Ray Wang suggested 5 M by analyzing 18 cases conducted by Altimeter Group which are, Monitoring, Mapping, Management, Middleware and Measurement (McKay 2010). In his another article, This integration ensures 360 degree view of the customer and introduction of virtual Master Data Management (MDM) replaced traditional MDM which tracks customer data and links more efficiently than the traditional one. In this case, the study represented a pictorial representation of InsideView⁴⁸, which Wollan, Smith and Zhou provided it as an example of SMCRM.

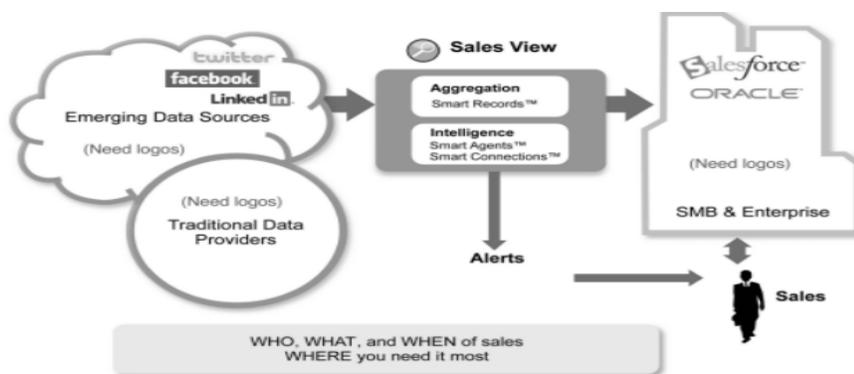


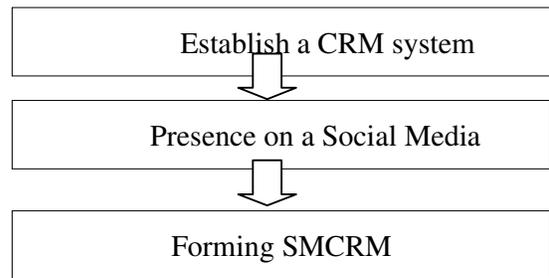
Figure3: InsideView’s SalesView System integrates Social Media and Traditional

Data into a company’s existing CRM system.

Adapted from: Wollan,R., Smith, N. & Zhou, C. (2011) *The Social Media Management Handbook: Everything You Need to Know to Get social media working in your business*, John Wilen & Sons Inc. Hoboken, New Jersey, p- 204

From the above analysis of integration of Social Media and Customer Relationship Management, it can be shown by a simple flow chart:

¹ **InsideView** is a Software as a service company that combines public, editorial and social media content for business research and intelligence. Founded in 2005, InsideView is mainly used by Sales teams in identifying and gathering information on potential clients. The company presents this aggregated information to users via their website or within a company's customer relationship management system. (<http://en.wikipedia.org/wiki/InsideView> accessed October 14, 2011)



Conclusion:

A new study co-produced by ISM, a leading CRM research and advisory firm, found that nearly 50 percent of the study's 440 Pharma sales professionals and executives reported using or planning to implement a mobile CRM platform within the next two years whereas 43 percent said they thought social media CRM integration could be advantageous to sales management and lead generation (Tolve 2011). From this analysis it can be said that, SMCRM has a bright future. This analysis makes SMCRM as a lucrative strategy towards companies.

Using technology in order to improve customer relationship and interaction assures furthest return on investment (Shane, 2010). The integration of social media and CRM technology will give businesses an unprecedented ability to build deep relationships with their customers within a few years and that's why, Social application vendors will increasingly tailor their products in accordance with the market shift towards CRM use, according to Gartner. (Goodwin 2011). Reggie Bradford, CEO of social media publishing software company Virtue⁴⁹ "We've always believed social and CRM should be closely intertwined.

But there is a point of distinction on the perception of businesses. Many businesses are missing out because they view social networking as another sales and support channel, rather than a way of understanding their customers, says Jim Davies the Gartner research director (Goodwin 2011). He advises CIOs to incorporate social media into their CRM strategies to help their organizations gain a better understanding of the mood of their customers, their needs, aspirations, what they like and what they don't like (cited earlier).

In fine, it can be said that, successful integration of Social Media and Customer Relationship Management is of the essence in the efficient and effective performance of business. Businesses have to take it not only as a current trend in business field but also a long term investment to incorporate it in the business operations. Proper management of SMCRM is imperative, so qualified fellows should be available and should set up proper strategy for efficient and effective utilization of SMCRM

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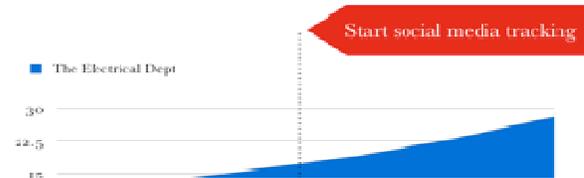
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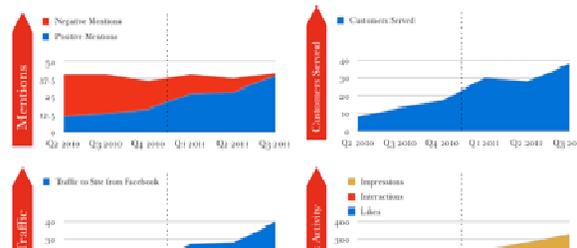
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Appendix A

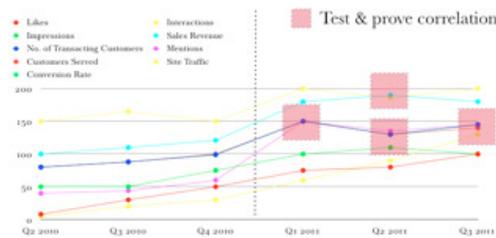
Social Media ROI
Step 1. The starting line



Social Media ROI
Step 2. Track social media activity



Social Media ROI
Step 3. Relationship of sales & social media



Source : Evans, T.

2008, 3 steps to measuring social media ROI

<http://www.marketingmag.com.au/blogs/3-steps-to-measuring-social-media-roi-6303/> accessed October 13, 2011

Effects of service quality and price on satisfaction and the consequent learning outcomes of international students

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Abstract

Purpose – The purpose of this conceptual paper is to propose a model to identify the vital dimensions of service quality offered by universities and their effects on satisfaction and the consequent learning outcomes of international students. Another stream of this study indicates the relationship between price and student's satisfaction.

Design/methodology/approach – A literature review was conducted to identify the theoretical model based on the recognized variables. The paper provides a description of each variable as well as insights into service quality, price, satisfaction and learning outcomes.

Findings – The goal of the implementing service quality model is to show the effect of five dimensions of SERVQUAL namely, assurance, empathy, reliability, responsiveness, and tangibles on international students' satisfaction, which enhances their learning outcomes. Lastly, the effect of price in monetary and non-monetary dimensions is discussed in detail.

Practical implications – This study has practical implications, the most important of which is the new window opened for universities in different countries involved in attracting overseas students. The considerable pull of strong students' learning outcomes will assist universities to attain worldwide recognition and credibility and be very successful in attracting international students.

Originality/value – This study is one of the first which proposes a model for the evaluation of learning outcomes of international students.

Keywords Service quality, Price, Satisfaction, Learning outcomes, International students

Paper type Conceptual paper

1. Introduction

In the 21st century, the global market demands employees that are knowledgeable and skilful (Awang, 2010). To survive in today's competitive market, organizations and economic agents have prioritized the employment of highly educated persons (Diaconu and Pandelica, 2011; Sitzmann *et al.*, 2010) who have intellectual, creative, innovative, communicative and critical thinking abilities (Awang, 2010). Such a situation has motivated people to seek quality education abroad in order to develop their personal abilities and acquire various skills (Kwai, 2009). As a result of this mobility and international demand for higher education, universities are faced with various challenges (Arambewela and Hall, 2008). One of the critical challenges for universities is to successfully characterize themselves as institutions offering student centered learning; to be able to say where their students have been and what they have learnt at the end of their learning journey (Scott, 2011); in short, to be able to offer satisfactory and quality learning outcomes. Universities should pay more attention to the student learning outcomes in order to adapt these outcomes to the new worldwide orders and meet the needs of the market (Ahmed, 2010).

Students' learning outcomes is defined as a collection of abilities that are observable in the form of knowledge, and expected skills after graduation (Anderson *et al.*, 2005; Harden, 2002). Such learning outcomes should broadly encompass the development of students in several domains such as cognitive and affective (behavioral) (Anderson *et al.*, 2005; Lizzio *et al.*, 2002). Indeed, students are judged based on their learning outcomes (Scott, 2011). Students, therefore, are not only customers of universities (Ueda and Nojima, 2012; Awang, 2010; Kuo and Ye, 2009) but also products (Emery *et al.*, 2001) of the university who can influence society and potential students (Jurkowitsch *et al.*, 2006).

Today, international students in many universities throughout the world are one of the important student groups with their needs and expectations. In this context, previous academic studies have been carried out on international students focusing on destination choice (Padlee *et al.*, 2010; Michael *et al.*, 2004), trips in the host country (Min-En, 2006), push and pull factors (Lam *et al.*, 2011; Rohmi, 2010; Llewellyn-Smith and McCabe, 2008), tourism approaches (Cardon *et al.*, 2011), adjustment issues (Araujo, 2011; Tarry, 2011; Yusoff, 2011; Andrade, 2006) as well as learning style preferences (Boland *et al.*, 2011; Wang and Moore, 2007; Huang, 2005). However, there remains a dearth of research on the

evaluation of international students' learning outcomes. To address this gap, this study uses the widely-used and accepted service quality model by Parasuraman *et al.* (1990) as well as price components by deploying satisfaction as a fundamental component to enhance learning outcomes.

Filling this gap in the literature is significant because it will pave the way for universities to implement the appropriate strategies to meet the needs and expectations of international students, making this target group more satisfied, and raising their level of learning outcomes. Moreover, it assists the nations involved to become regional education hubs (Mok, 2011), attract more students (Llewellyn-Smith and McCabe, 2008), and enhance the nations' economies (Padlee *et al.*, 2010).

The main purpose of this research is to evaluate the learning outcomes of international students who are studying in Malaysian universities. In particular, this study strives to determine the impact of five dimensions of service quality and two dimensions of price on learning outcomes by mediating students' satisfaction. Thus, this reality provides an excellent platform for researchers. The following theoretical model (Figure 1) frames the constructs and their relationships in the model. To further understand the salience of implementing service quality on the learning outcomes, the research objectives driving this study are as follows:

- 1) To investigate the influence of service quality on learning outcomes as mediated by satisfaction.
- 2) To investigate the influence of price on learning outcomes as mediated by satisfaction.

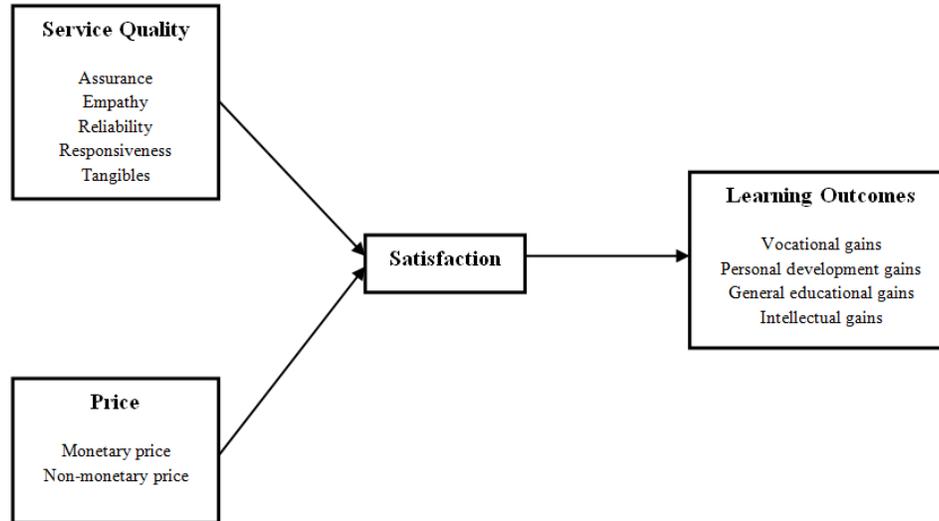


Figure1.
Proposed theoretical
framework

The proposed model is designed with service quality and price as independent variables. Service quality consists of five dimensions namely, assurance, empathy, reliability, responsiveness, and tangibles and price with two dimensions including monetary and non-monetary price. Satisfaction is a mediator variable while learning outcomes is a dependent variable. The following discussion provides an overview of the variables and conclusions as well.

2. Service quality

In the 1980s, the issue of service quality attracted the academics' and marketing professionals' attention to explore the quality of services from the consumers' viewpoint in order to protect consumers (Manjunatha and Shivalingaiah, 2004). Parasuraman *et al.* (1988) developed a definition of service quality (SERVQUAL) as being "the overall evaluation of a service firm that stems from comparing the firm's performance with the customer's expectations of how a firm should perform". The SERVQUAL model contains five dimensions (Figure 2) divided into two groups which include: tangible and intangible dimensions (Ahmed *et al.*, 2010). While the tangibles dimension is related to a tangible group, assurance, responsiveness, reliability, and empathy belong to the intangible group (Ahmed *et al.*, 2010).

Tangibles allude to physical evidence of services and facilities, as well as appearance of equipment and personnel. Assurance involves knowledge and courtesy of employees, and their ability to inspire trust and confidence. Responsiveness refers to the readiness to help customers and provide them prompt service such as setting up appointments quickly. Reliability is defined as an ability to honor the promises as well as to perform the promised service dependably and accurately. Finally, empathy involves making the effort to understand the customer's specific requirements and providing individualized care and attention (Parasuraman *et al.*, 1985).

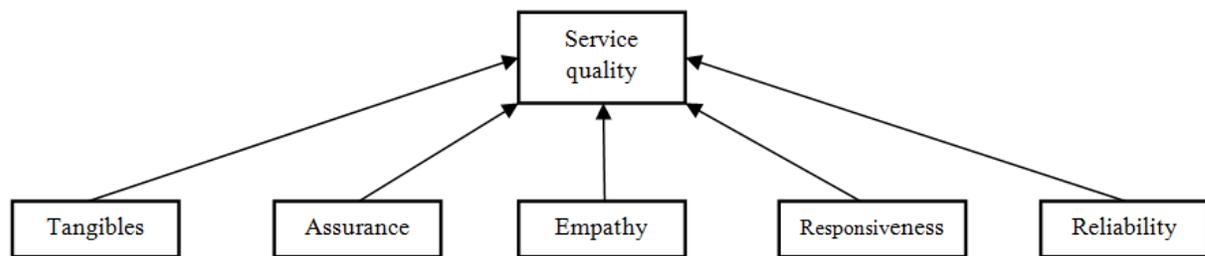


Figure 2.
SERVQUAL model

The SERVQUAL instrument is an applicable and practical tool for service provider organizations and companies in order to appraise the perception of the customers about the quality of delivered service (Parasuraman *et al.*, 1988). The SERVQUAL instrument enables service providers to measure the difference between what is expected from a service, and the perception of the actual service that a customer receives. In the universities, good service quality provides a considerable competitive advantage among other universities, so higher educational institutions endeavor to present enhanced quality of service in order to strengthen their chance of leading the market (Hasan *et al.*, 2008; Hanaysha *et al.*, 2011; Alves and Raposo, 2010). As an illustration, Australian universities strive to improve their service offering to students as a means of enhancing the universities' performance (Brown and Mazzarol, 2009). Measurement of service quality reveals to what extent the service delivered fulfills customers' expectations, and this is fundamental for satisfying the customers (Manjunatha and Shivalingaiah, 2004; Cronin and Taylor, 1992). Consequently, for a university it is crucial to understand what the international

student value in their university experiences in order to boost their satisfaction (Pereda, 2007).

3. Price

Price is another highlighted concept in this study. Price is what is given up or sacrificed for receiving a product or service (Zeithaml, 1988). In this regard, Kotler and Armstrong (2010) reported that “price is the amount of money exchanged for a product or service, or the sum of the values that customers exchange for the benefits of acquiring the product or service”. In the majority of past studies, price was considered as tuition fees, but the importance of the other dimension of price was ignored. According to a study by Zeithaml (1988), price has two dimensions, which include monetary price and non-monetary price. Lovelock and Wirtz (2007) mentioned that customers see price as a key part of what they must incur to obtain wanted benefits and they go beyond just money and also pay attention to the outlays of their additional monetary prices such as time expenditure, unwanted mental and physical efforts. In fact, monetary price refers to the tangible payment while non-monetary price shows some intangible payment by customers such as time, energy, and effort (Cronin *et al.*, 2000).

Zeithaml *et al.* (2006) pointed out that price is one of the crucial factors that impact on customer’s satisfaction. As such, strategic pricing for services offer by different organizations can provide a competitive advantage and play an important role in customers’ satisfaction (Kuo and Ye, 2009). In the university context, price performs an essential role in the student satisfaction (Gruber *et al.*, 2010), which is influenced by price like tuition fees as well as psychological and effort prices - the proximity or remoteness of his residence, number of years of study (Kao, 2007; Diaconu and Pandelica, 2011). Therefore, it is anticipated that there will be a decline in the level of satisfaction if prices charged are deemed as unreasonable (Cronin *et al.*, 2000).

4. Satisfaction

According to Oliver (1997, 1989), satisfaction is a kind of gratification which is felt by customers through their particular consumption that makes them delighted. In addition, Kotler *et al.* (2009, p.14) clarified satisfaction as “a person’s feeling of pleasure or disappointment resulting from comparing a product’s

perceived performance (or outcome) in relation to his or her expectations”. Customer’ satisfaction is a significant facet for each industry, particularly service organizations (Tuan, 2012; Hanaysha *et al.*, 2011). Today, universities find themselves in the class of service industry that need to pay considerable attention to the satisfaction of their students (Letcher and Neves, 2010). In addition, student’s overall satisfaction is affected by the sum of a student’s academic, social, physical, and spiritual value experiences as a product of the university (Sevier, 1996) and is a superior goal in the achieving competitive advantage (Ahmed *et al.*, 2010; Arambewela and Hall, 2009).

Customer’s satisfaction is rooted in quality of service (Hanaysha *et al.*, 2011; Hasan *et al.*, 2008; Shemwell *et al.*, 1998; Cronin and Taylor, 1992; Bolton and Drew, 1991). Therefore, whenever customers perceive that the quality of delivered service goes beyond their expectations they will feel satisfied (Arambewela and Hall, 2008). In the academic context, universities should endeavor to meet the needs of students and enhance their satisfaction by deploying a well-planned strategy to offer more appropriate services. Universities must pay great attention to international students’ satisfaction by concentrating on both educational and non-educational attributes (Arambewela and Hall, 2008). While educational attributes refer to the academic environment such as an aggregation of good teaching, clear goals and standards (Lizzio *et al.*, 2002), the non-educational attributes are related to some factors such as social issues and economic considerations (Arambewela & Hall, 2008). Accordingly, it is necessary for universities to pay attention to the international students’ variety of needs and levels of expectation to successfully satisfy them.

5. Learning outcomes

Demands of the global market in the 21st century for employees have dramatically concentrated on adroit individuals (Majid *et al.*, 2010). This situation puts a heavy burden on the shoulders of universities to train highly qualified and scholarly individuals (Diaconu and Pandelica, 2011). Therefore, to improve students’ growth and development, attention to learning outcomes as a strategic tool plays a significant role for a university. Learning outcomes include cognitive, affective (behavioral) outcomes, which are products of the learning process (Lizzio *et al.*, 2002; Allen and Friedman, 2010). Cognitive outcomes

refer to developed knowledge and professional skills while non-cognitive outcomes focus on the change in attitudes and values of individuals (Ewell, 1985). In this context, critical thinking, analysis, synthesis, creativity, problem solving, evaluation, and computer ability are some instances of desirable learning outcomes (Mundia, 2012).

According to a study by Tam (2007), learning outcomes comprise four dimensions namely, vocational gains, personal development gains, general educational gains, and intellectual gains. Vocational gains is considered as a cognitive learning outcome since it includes the extent to which knowledge and skills have been gained in training, while personal development gains, general educational gains and intellectual gains are related to the behavioral and affective learning outcomes. Student learning outcomes evaluation has become something of an industry standard for higher education (Anderson *et al.*, 2005). Thus, this method is a useful tool for estimating the level of institutional effectiveness (Astin *et al.*, 1996) and reflects whatever is essential for improving the quality process (Scott, 2011).

Studying abroad provides an opportunity for international students that it is not just confined to the university's proposed curriculum. Learning a foreign language, promoting personal career, cross-cultural skills, and global mindedness are significant outcomes of international students (Kwai, 2009). In this regard, students' satisfaction plays an important role in developing students' skills and knowledge. In fact, satisfaction is a significant predictor of students' learning outcomes (Letcher and Neves, 2010; Eom, 2009; Tam, 2007). Lastly, if universities want to be marketized continually, they should introduce themselves to the market and their stakeholders (students, parents, employers and governments) by exposing the high quality of learning outcomes (Hou, 2010).

6. Conclusion

In this study we proposed a model that describes the relationships between service quality, price, satisfaction and learning outcomes. Service quality is a modern and interesting model in marketing theory employed in this research. The highlight in this research is the application of this model to capture the significant dimensions which have impact on international students' satisfaction. Price with two dimensions which are monetary and non-monetary plays a role as a predictor variable of students'

satisfaction. The influence of satisfaction on learning outcomes of international students is another stream of the research. The findings from this research will hopefully provide useful insights for scholars, universities and educational institutes. Theoretically, applying the proposed theoretical framework empirically will contribute to the body of knowledge.

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PORTFOLIO RISK AND RETURNS: SINGLE INDEX MODEL OF BSE

30

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The present study attempts to analyse the portfolio performance using Sharpe’s single index model (SIM) and also attempts to test the relationship between risks and return using the model. For the purpose of analysis, the weekly closing price of BSE 30 listed firms for the period from 4th January 2003 to 29th December 2012 has been used. The study proves that return decreased proportionally with the risk and there was a high positive correlation between portfolio beta and systematic risk with portfolio expected return for the study period.

Keywords: Beta, investment decision, portfolio return, systematic risk

JEL Classification: G11 and G32

Introduction

The 'investment' is '*the act of investing something*' - Oxford Dictionary. It is the commitment of money or capital to purchase financial instruments or other assets in order to gain profitable returns in the form of interest, income or appreciation of the value of the instrument. Traditionally, investments were confined to bank deposits, however modern financial markets provide a wide spectrum of investment opportunities to both individuals and corporate entities. Investments generally involve *real estate* viz land, building, gold or silver etc and *financial assets* include shares, debentures, bank deposits, mutual funds, insurance etc. Every asset carries a return, and the returns to be measured to know whether the rate of return offered by the asset meets the expectation of the investor. The chance of not getting the expected or targeted returns is called '*risk*'. It is the probability that a loss will occur. Hence, there arises a need for analysing the relationship between risk and return for various investment avenues.

Sharpe (1963) developed the single index model (*SIM*) on the assumption that the security price move together because of the common movement in the stock market. In *SIM*, the portfolio risk depends on the sensitivity of the security associated to the changes of the portfolio market return. It is also assumed that the macro-economic factor i.e. the rate of return on a market index move the security prices and no other factors have any influence on the security prices. According to *SIM* model, the return of any stock can be decomposed into the expected excess return of the individual stock due to firm-specific factors, commonly denoted by its alpha coefficient (α), the return due to macro-economic events that affect the market, and the unexpected micro-economic events that affect only the firm. When compared to **Markowitz (1959)** model, the *SIM* simplifies the input requirements and performs fairly well and it represents a major practical advance in portfolio analysis. Therefore, it becomes necessary to analyse the portfolio risk and return performance using *SIM* consisting of *BSE* 30 stocks and to measure systematic and unsystematic or unique risk.

Review of Literature

Portfolios, which are combinations of securities, tend to spread risk over many securities and thus help to reduce the overall risk involved. **Varadharajan and Vikkraman (2011)** stated that '*investing in a*

portfolio of securities helped to spread the risk over many securities and thus reducing overall risk involved. Using 25 stocks from five different sectors, they found that if some of the sectors do not perform well as expected, it will be compensated by the excess returns from the other sectors that exceed the expectation, and this is how risk is diversified.

Chandra and Mishra (2013) determined optimal portfolio with help of *SIM* for 3 years from 2010-2012. For this purpose, Nifty index and Nifty Junior index has been considered and analysed using *SIM*. The study found that in 2010, the number of scrip in the optimal portfolio is nine while in 2011 and 2012 the number of scrips are more than 10. The study stated that return on securities of different portfolio is independent of the systematic risk prevailing in the market. **Jeyachitra et al. (2010)** analysed the portfolio performance of Nifty stock and found that there is a significant relationship between portfolio returns and portfolio beta. The study also found that there was a positive correlation between portfolio returns and risk.

Swaroop and Samir (2012) constructed an optimal portfolio with the help of *SIM*. Fourteen selected stocks from the manufacturing sector have been taken for analysis and daily data were collected for the period of 10 years from 2003 to 2012. The study found that three stocks viz Asian Paints, Tata Motors and Hero Motor Corporation constitute an optimal portfolio with proportion of investment 1.9%, 38.8% and 28.2% respectively.

Saravanan and Natarajan (2012) attempted to construct an optimal portfolio by using *SIM*. The daily data of NSE Nifty stocks and its index for the period 2006 - 2011 are considered. The optimal portfolio consists of four stocks selected out of 50 short listed scrips, with the return of 0.116. The study found that significance of beta is not consistent with its return, and also stated that every security depends on the overall performance of the market.

Varadharajan and Ganesh (2012) selected companies from three sectors namely power sector, shipping sector and textile sector for construction of optimal portfolio. Five stocks with maximum return for a given risk are constructed from the selected eighteen firms.

The study found optimal portfolio, which comprises five companies viz Jayaprakash Powers, Gujarat Power Corporation, NTPC (power), Mercator Lines Ltd. (shipping) and Patspin Ltd. (Textile).

Objective of the Study

The objectives of the study are as follows:

1. To study the relationship between portfolio returns and portfolio beta.
2. To analyse the relationship between portfolios total systematic risk and unsystematic risk with portfolio return.

Hypotheses Developed for the Study

H_0^1 : There is no significant difference between portfolio returns and portfolio beta.

H_0^2 : There is no significant relationship between beta and total systematic risk with portfolio return.

Methodology of the Study

Period of the Study and Sample Size

The data set comprised of BSE Sensex index and BSE 30 firms' closing prices. For the purpose of analyse, the study used weekly data for BSE 30 firms for the period of ten years from 4th January 2003 to 29th December 2012 as the daily and monthly data would be very noisy. Thus, weekly data has been considered as it suits best the purpose of the study. The population for the study consists of all firms registered under BSE 30. However, due to lack of data for consistently for ten years, five firms were ignored. Thus, the final data comprises 25 firms only. The list of sample firms is given in *annexure 1*.

Source of Data

The study is fully based on secondary data. The weekly closing prices were obtained from Prowess database from Centre for Monitoring Indian Economy (*CMIE*). The other information was obtained from books, journals and websites.

Tools Used for Analysis

(i) Return for security and market

The stock returns and market returns were calculated with the help of the following formula

$$\text{Today's Stock Return} = \frac{\text{Today's price} - \text{Yesterday's price}}{\text{Yesterdays's price}} \times 100 \quad \text{----- (1)}$$

$$\text{Today's Market Return} = \frac{\text{Today's index} - \text{Yesterday's index}}{\text{Yesterday's index}} \times 100 \quad \text{----- (2)}$$

(ii) Individual security expected return and risk

The risk measures like market beta were estimated for each 25 stocks by regressing the weekly stock return on the weekly market return. Single index model expresses the return on each security as a function of the return on a broad market index as follows:

$$E(R_i) = \alpha_i + \beta_i R_m + e_i \text{----- (3)}$$

Where,

$E(R_i)$ = Expected return on i asset

α_i = Intercept of security i

R_m = Rate of return on market index

β_i = Slope of the security i

e_i = random error term (residuals)

(iii) Portfolio expected return and risk

Based on the market beta, the selected securities were arranged in descending order of beta and grouped into five portfolios of five stocks each (*vide annexure II*).

$$\beta_p = \sum_{i=1}^n X_i \beta_i \quad \text{----- (4)}$$

The expected return on portfolio represents the weighted average of the estimated return on each security in the portfolio. The proportion of each stock in the portfolio is considered as the weight of that stock.

$$E(R_p) = \sum_{i=1}^n w_i (\alpha_i + \beta_i x) \quad \text{----- (5)}$$

Where,

$E(R_p)$ = Expected return on portfolio

w_i = Weighted average

α_i = Intercept

$\beta_i x$ = Slope

(iv) Total risk of a security

Sharpe (1963) stated that the variance explained by the index could be referred to as the

‘systematic risk’ and the unexplained variance is called the residual variance or ‘unsystematic risk’.

Total risk of a security is the sum of total systematic risk and total unsystematic risk. It is measured by the variance of the rate of returns over a certain period. It is thus:

$$\text{Total risk} = \text{total systematic risk} + \text{total unsystematic risk} \text{----- (6)}$$

$$\text{Total systematic risk} = \beta_i^2 \times (\text{Variance of market risk}) \text{----- (6.1)}$$

Equation 6.1 can be written as

$$\text{Total systematic risk} = \beta_i^2 \sigma_m^2 \text{----- (6.2)}$$

$$\text{Unsystematic risk} = \text{Total risk} - \text{Systematic risk} \text{----- (6.3)}$$

$$= \sigma_i^2 - \beta_i^2 \sigma_m^2$$

$$= e^2 \text{----- (6.4)}$$

The total risk can be written as

$$\sigma_i^2 = \beta_i^2 \sigma_m^2 + e^2 \text{----- (6.5)}$$

Where,

$$\sigma_i^2 = \text{Total risk}$$

$$\beta_i^2 \sigma_m^2 = \text{Systematic risk}$$

$$e^2 = \text{Unsystematic risk}$$

Results and Discussion

Table 1: Descriptive Statistics of Returns of Sample Firms

S. No.	Firm	Return	Variance	S D	Beta
1	Bharat Heavy Electricals Ltd.	0.3873	45.2172	6.7244	1.0832
2	Bharti Airtel Ltd.	0.6810	31.9916	5.6561	0.7891
3	Cipla Ltd.	0.1704	38.2121	6.1816	0.7113
4	Dr. Ready's Laboratories Ltd.	0.2534	21.6848	4.6567	0.4535
5	GAIL (India) Ltd.	0.4445	26.5943	5.1570	0.8782
6	HDFC Bank Ltd.	0.4782	32.7569	5.7234	0.9761
7	Hero Motocorp Ltd.	0.4750	19.0944	4.3697	0.5340
8	Hindalco Industries Ltd.	0.1763	56.7937	7.5362	1.3228
9	Hindustan Unilever Ltd.	0.2847	16.1431	4.0179	0.5358
10	Housing Deve. Finance Corpn. Ltd.	0.4346	36.9472	6.0784	1.0141
11	ICICI Bank Ltd.	0.5886	35.8731	5.9894	1.4513
12	ITC Ltd.	0.2651	35.2522	5.9374	0.5893
13	Infosys Ltd.	0.1140	34.9450	5.9114	0.6605

14	Jindal Steel & Power Ltd.	0.7180	88.9201	9.4297	1.4574
15	Larsen & Toubro Ltd.	0.6475	45.2508	6.7269	1.2721
16	Mahindra & Mahindra Ltd.	0.6388	41.5554	6.4463	1.0951
17	Oil & Natural Gas Corpn. Ltd.	0.1973	36.1148	6.0096	0.8764
18	Reliance Industries Ltd.	0.3646	29.2494	5.4083	1.1595
19	State Bank Of India	0.5526	29.5157	5.4328	1.1428
20	Sterlite Industries (India) Ltd.	0.5616	87.7337	9.3666	1.4438
21	Sun Pharmaceutical Inds. Ltd.	0.3360	37.4610	6.1205	0.4703
22	Tata Motors Ltd.	0.4536	48.1033	6.9357	1.2527
23	Tata Power Co. Ltd.	0.4033	42.6959	6.5342	1.0363
24	Tata Steel Ltd.	0.4324	45.1322	6.7181	1.4569
25	Wipro Ltd.	-0.0264	38.7375	6.2239	0.8940

Source: Computed results based on the data collected from the CMIE Prowess database.

Note: SD- Standard Deviation

Table 1 shows the securities and their return, variance, standard deviation and beta. From the table 1, it is inferred that Jindal Steel & Power Ltd. (0.71) has highest return followed by BhartiAirtel Ltd (0.68), Larsen & Toubro Ltd (0.64), and Mahindra & Mahindra Ltd. (0.63). Whereas Cipla Ltd., (0.17), Infosys Ltd. (0.11) and Wipro Ltd. (-0.02) have low returns. Likewise, the highest and the lowest beta are vested with Jindal Steel & Power Ltd. (1.45) and Dr. Reddy's Laboratories Ltd. (0.45) respectively. Dispersion is measured using variance or standard deviation. The *SD* is high for Jindal Steel & Power Ltd. (9.42) and it is low for Hindustan Unilever Ltd. (4.01). The expected return on the security viz Jindal Steel & Power Ltd. is high and the *SD* is very high, indicating that high return can be earned by taking more risk. Hence, return, beta and *SD* is very important for an investor, because every investor prefers a stock with higher return and lower *SD*.

Table 2: Result of Regression Equation and Total Risk for five Portfolios

Portfolio	Stock	PB	E(R _p)	$\beta^2_i \sigma^2_m$	e^2	Pt _{var}
P1	5	1.44*	0.56	22.91	39.98	62.89
P2	5	1.21*	0.54	15.83	22.91	38.74
P3	5	1.03*	0.37	11.31	28.03	39.34
P4	5	0.81*	0.37	6.98	26.59	33.57
P5	5	0.54*	0.32	3.03	22.90	25.93
Average		1.00	0.43	12.01	28.08	40.09

Source: Computed results based on the data collected from the CMIE Prowess database.

Note: *P1 -Portfolio 1, P2-Portfolio 2 ... P5-Portfolio 5. PB-Portfolio Beta, E(R_p)-Expected Return on Portfolio, β²_i σ²_m- Systematic risk of the portfolio, e² - Unsystematic risk of the portfolio, P_{tvar} – Portfolio variance or total risk * Significant at 1% level.*

Table 2 presents portfolio beta, expected return on each (say 5) portfolio, systematic risk and unsystematic risk, which is also called as unique risk, security specific risk or residuals. Finally the portfolio variance or total risk of each portfolio was also tabulated for weekly share price data. From the table it is inferred that the betas are highly significant at 1% level for all portfolios. As stated, all the 25 sample firms were arranged in descending order based on their beta value. Then the portfolio is constructed by taking the stock of five firms in each portfolio i.e. five firms each. Hence, five portfolios are constructed with five stocks each.

Table 2 reveals the fact that the portfolio constructed using weekly data has highest risk for **P1**. The beta has decreased from 1.44 (**P1**) to 0.54 (**P5**). Similarly, the expected portfolio returns (**E(R_p)**) also decreased from 0.56 to 0.32 proportionate to the risk (**PB**). The portfolio risk and returns values of **P1** and **P2** were higher than the average portfolio. It shows that **P1** and **P2** perform better than the other **P3**, **P4** and **P5**. Thus, the null hypothesis **H₀¹** is rejected at 1% level indicating that there is a significant difference between portfolio returns and portfolio beta.

Systematic risk (**β²_i σ²_m**) for weekly portfolios shows a decreasing trend from **P1** (22.91) to **P5** (3.03). Similarly the unsystematic risk (**e²**) was also decreased from 39.98 (**P1**) to 22.90 (**P5**) proportionate to the systematic risk. The total risk (**P_{tvar}**) includes the systematic risk (**β²_i σ²_m**) and unsystematic risk of portfolio.

Table 3: Correlation between Portfolio Beta and Portfolio Expected Return

Beta and return	Correlation coefficient	Beta	Return
Beta	Pearson Correlation	1	.917*
	Sig. (2-tailed)		.028
	N	5	5

Return	Pearson Correlation	.917*	1
	Sig. (2-tailed)	.028	
	N	5	5

Source: Computed results based on the data collected from the CMIE Prowess database.

*Correlation is significant at 5% level.

Table 3 depicts the correlation between portfolio beta and portfolio expected return. The correlation coefficient between portfolio beta (PB) and portfolio expected returns ($E(R_p)$) is 0.917, which shows that there is a positive correlation and linear relationship between them at 5% level of significance.

Table 4: Correlation between Systematic Risk and Portfolio Expected Return

Systematic risk and return	Correlation coefficient	Systematic risk	Return
Systematic risk	Pearson Correlation	1	.931*
	Sig. (2-tailed)		.021
	N	5	5
Return	Pearson Correlation	.931*	1
	Sig. (2-tailed)	.021	
	N	5	5

Source: Computed results based on the data collected from the CMIE Prowess database.

*Correlation is significant at 5% level

The correlation between portfolio beta and portfolio expected return are shown in table 3, which shows that there is a positive correlation between these two variables. Whereas table 4 shows the correlation coefficient between total systematic risk ($\beta_i^2 \sigma_m^2$) and portfolio expected returns ($E(R_p)$) is 0.931. It is significant at 5% level of significance and has a linear relationship between them. The p value for PB and $E(R_p)$ is 0.028 and for $\beta_i^2 \sigma_m^2$ and $E(R_p)$ is 0.021. Hence (since the p value for both comparisons is less than 0.05) the H_0^2 is rejected at 5% level of significance. It can be concluded that there is a significant relationship between portfolio beta (PB) and total systematic risk ($\beta_i^2 \sigma_m^2$) with portfolio return ($E(R_p)$).

Conclusion

A portfolio of securities can enhance the return by balancing the risk among the constituent securities. The present study aims to analyse the relationship between portfolio beta and expected return on weekly portfolio analysis. The study proves that there exists a significant difference betas and expected return on portfolio. The study found that there was a highly significant positive correlation between portfolio beta and return. And the significant correlation coefficient between expected return on portfolio and systematic risk reveals a linear and positive relationship at 5% level of significance. This signifies that the investors adjust their holdings of stocks in response to systematic and unsystematic risk.

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ANNEXURE - I

List of sample firms

S. No.	Name of the Firm	S. No.	Name of the Firm
1	Jindal Steel & Power Ltd.	14	H D F C Bank Ltd.
2	Tata Steel Ltd.	15	Wipro Ltd.
3	I C I C I Bank Ltd.	16	G A I L (India) Ltd.
4	Sterlite Industries (India) Ltd.	17	Oil & Natural Gas Corpn. Ltd.
5	Hindalco Industries Ltd.	18	BhartiAirtel Ltd.
6	Larsen & Toubro Ltd.	19	Cipla Ltd.
7	Tata Motors Ltd.	20	Infosys Ltd.
8	Reliance Industries Ltd.	21	I T C Ltd.
9	State Bank of India	22	Hindustan Unilever Ltd.
10	Mahindra & Mahindra Ltd.	23	Hero Motocorp Ltd.
11	Bharat Heavy Electricals Ltd.	24	Sun Pharmaceutical Inds. Ltd.
12	Tata Power Co. Ltd.	25	Dr.Ready's Laboratories Ltd.
13	Housing Development Finance Corpn. Ltd.		

ANNEXURE - II
Final Five Portfolios based on Beta Values

S. No.	Portfolio No.	Name of the Firm	Beta	Rank
1	I	Jindal Steel & Power Ltd.	1.4574	1
2		Tata Steel Ltd.	1.4569	2
3		I C I C I Bank Ltd.	1.4513	3
4		Sterlite Industries (India) Ltd.	1.4438	4
5		Hindalco Industries Ltd.	1.3228	5
6	II	Larsen & Toubro Ltd.	1.2721	6
7		Tata Motors Ltd.	1.2527	7
8		Reliance Industries Ltd.	1.1595	8
9		State Bank of India	1.1428	9
10		Mahindra & Mahindra Ltd.	1.0951	10
11	III	Bharat Heavy Electricals Ltd.	1.0832	11
12		Tata Power Co. Ltd.	1.0363	12
13		Housing Development Finance Corpn. Ltd.	1.0141	13
14		H D F C Bank Ltd.	0.9761	14
15		Wipro Ltd.	0.8940	15
16	IV	G A I L (India) Ltd.	0.8782	16
17		Oil & Natural Gas Corpn. Ltd.	0.8764	17
18		BhartiAirtel Ltd.	0.7891	18

19	V	Cipla Ltd.	0.7113	19
20		Infosys Ltd.	0.6605	20
21		I T C Ltd.	0.5893	21
22		Hindustan Unilever Ltd.	0.5358	22
23		Hero Motocorp Ltd.	0.5340	23
24		Sun Pharmaceutical Inds. Ltd.	0.4703	24
25		Dr. Ready's Laboratories Ltd.	0.4535	25

Symbols and Notations Used

Following symbols and notations are used to build up **SIM** model:

R_i = Return on security i (the response variable)

R_m = Return on market index (the predictor variable)

α_i = Intercept of the best fitting straight line of R_i on R_m drawn on the Ordinary Least Square (OLS) method or 'Alpha Value'. It is that part of security i's return which is independent of market performance.

β_i = Slope of the straight line (R_i on R_m) or 'Beta Coefficient'. It measures the expected change in the response variable (R_i) given a certain change in the predictor variable (R_m)

e_i = random disturbance term relating to security i

W_i = Proportion (or weights) of investment in securities of a portfolio.

σ_{ei}^2 = Unsystematic risk (in terms of variance) of security i

R_p = Portfolio Return

σ_p^2 = Portfolio Variance (total risk)

Selecting Various Industrial Competitors Affect The Risk Level of Viet Nam Investment and Finance Industry

*Dinh Tran Ngoc Huy*⁵⁰

ABSTRACT

Under a one factor model, this paperwork estimates the impacts of the size of firms' competitors in the investment and finance industry on the market risk level, measured by equity and asset beta, of 10 listed companies in this category.

This study identified that the risk dispersion level in this sample study could be minimized in case the competitor size kept as current approximate size (measured by equity beta var of 0,233).

Beside, the empirical research findings show us that asset beta max value increases from 1,592 to 1,705 when the size of competitor doubles.

Last but not least, most of beta values are acceptable except a few exceptional cases.

Ultimately, this paper illustrates calculated results that might give proper recommendations to relevant governments and institutions in re-evaluating their policies during and after the financial crisis 2007-2011.

KEYWORDS : *risk management, competitive firm size, market risk, asset and equity beta, investment and finance industry*

JEL CLASSIFICATION : *G00, G3, G30*

1. Introduction

Together with financial system development and the economic growth, throughout many recent years, Viet Nam investment and finance industry is considered as one of active economic sectors, which has some positive effects for the economy. Additionally, financial risk and reactions has become an issue after the global crisis 2007-2009 which has some certain impact on the whole Viet nam economy, and specifically, the Viet Nam investment and finance industry. Hence, this research paper analyzes market risk under a one factor model of these listed firms during this period.

This paper is organized as follow. The research issues and literature review will be covered in next sessions 2 and 3, for a summary. Then, methodology and conceptual theories are introduced in session 4 and 5. Session 6 describes the data in empirical analysis. Session 7 presents empirical results and findings. Next, session 8 covers the analytical results. Then, session 9 presents risk analysis and session 10 covers discussion. Session 11 will conclude with some policy suggestions. This paper also supports readers with references, exhibits and relevant web sources.

2. Research Issues

For the estimating of impacts of a one factor model: the size of competitor on beta for listed investment and finance industry companies in Viet Nam stock exchange, research issues will be mentioned as following:

Issue 1: Whether the risk level of investment and finance industry firms under the different changing scenarios of the size competitor increase or decrease so much.

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Issue 2: Whether the disperse distribution of beta values become large in the different changing scenarios of the size of competitor in the investment and finance industry.

3. Literature review

Black (1976) proposes the leverage effect to explain the negative correlation between equity returns and return volatilities. Diamond and Dybvig (1983) said banks can also help reduce liquidity risk and therefore enable long-term investment. Fan Eugene F., and French, Kenneth R., (2004) also indicated in the three factor model that “value” and “size” are significant components which can affect stock returns. They also mentioned that a stock’s return not only depends on a market beta, also on market capitalization beta. The market beta is used in the three factor model, developed by Fama and French, which the successor to the CAPM model by Sharpe, Treynor and Lintner.

Next, Kim et al (2002) noted that the nature of competitive interaction in an industry is important in assessing the effect of corporate product strategies on shareholder value. Pagano and Mao (2007) stated that An intermediated market can therefore remain viable in the face of competition from a possibly faster, non-intermediated market as long as the specialist can generate revenue for the above services that covers his/her costs associated with asymmetric information, order processing, and inventory management. Daly and Hanh Phan (2013) investigated the competitive structure of the banking industries in five emerging countries including Viet Nam and showed that the global financial crisis affected dramatically the competition of banking system in emerging Asian countries.

Last but not least, Ana and John (2013) Binomial Leverage – Volatility theorem provides a precise link between leverage and volatility.

4. Conceptual theories

The impact of competition on the size of competitor on the economy and business

In a specific industry such as investment and finance industry, there are many firms offering the similar products and services and this helps customers select a variety of qualified goods that meet their demand. Competitors could affect price and customer service policies; hence, affect revenues and profits of a typical company. The competition could drive down profits that can earn. Sources of competition include, but not limit to, training. Increasing training can help competition raising productivity.

Two or more different firms offer various products or services to the same group of customer and the same need. This is indirect competition.

5. Methodology

In this research, analytical research method is used, philosophical method is used and specially, scenario analysis method is used. Analytical data is from the situation of listed investment and finance industry firms in VN stock exchange and applied corporate tax rate is 25%.

Finally, we use the results to suggest policy for both these enterprises, relevant organizations and government.

6. General Data Analysis

The research sample has total 10 listed firms in the investment and finance industry market with the live data from the stock exchange.

Firstly, we estimate equity and asset beta values of these firms, as well as the risk dispersion. Secondly, we change the competitor size from approximate size to doubling size and slightly smaller size to see the sensitivity of beta values. We find out that in 3 cases, asset beta mean values are estimated at 0,574, 0,630 and 0,517 which are positively correlated with the size of competitors. Also in 3 scenarios, we find out equity beta mean values (1,050, 1,001 and 0,985) are also decreasing. Variations of competitors selected definitely have certain effects on asset and equity beta values.

Table 1 – The number of companies in research sample with different beta values and ratio

	current size		double size		smaller size	
Equity Beta	No. of firms	Ratio	No. of firms	Ratio	No. of firms	Ratio
<0	0	0,0%	0	0,0%	0	0,0%
0<beta<1	6	60,0%	7	70,0%	7	70,0%
Beta > 1	4	40,0%	3	30,0%	3	30,0%
total	10	100,0%	10	100,0%	10	100,0%
	current size		double size		smaller size	
Asset Beta	No. of firms	Ratio	No. of firms	Ratio	No. of firms	Ratio
<0	0	0,0%	0	0,0%	0	0,0%
0<beta<1	9	90,0%	9	90,0%	9	90,0%
Beta > 1	1	10,0%	1	10,0%	1	10,0%
total	10	100,0%	10	100,0%	10	100,0%

7. Empirical Research Findings and Discussion

In the below section, data used are from total 10 listed investment and finance industry companies on VN stock exchange (HOSE and HNX mainly). In the three scenarios, current financial leverage degree is kept as in the 2011 financial statements which is used to calculate market risk (beta) whereas competitor size is kept as current, then changed from double to slightly smaller size. In short, the below table 1 shows three scenarios used for analyzing the risk level of these listed firms. Market risk (beta) under the impact of tax rate, includes: 1) equity beta; and 2) asset beta.

 Table 2 – Analyzing market risk under three (3) scenarios (*Made by Author*)

	FL as current
Competitor size as current	Scenario 1
Competitor size slightly smaller	Scenario 2
Competitor size double	Scenario 3

7.1 Scenario 1: current financial leverage and competitor size kept as current

In this case, beta values of 10 listed firms on VN investment and finance industry market as:

(refer to exhibit 2)

There is no listed firms with both equity and asset beta values < 0 whereas there are 4 listed firms with equity beta values : 40% of firms.

7.2. Scenario 2: competitor size double

Beta values of total 10 listed firms on VN investment and finance industry market as:

(refer to exhibit 3).

There is no listed firms with both equity and asset beta values < 0 , whereas there are 3 listed firm with equity beta value : 30% of firms. However, there is just 1 listed firm with asset beta > 1 . Competitor size increase has reduced the number of with equity beta value > 1 .

7.3. Scenario 3: Competitor size slightly smaller

Beta values of total 10 listed firms on the investment and finance industry market in VN as:

(refer to exhibit 4).

There is no listed firms with both equity and asset beta values < 0 and there are 3 listed firms with beta values > 1 (or 3 firms). However, competitor size decrease has reduced the number of firms (to 10%) with equity beta value > 1 .

All three above tables and data show that values of equity and asset beta in the three cases of changing competitor size certain fluctuation.

8. Comparing statistical results in 3 scenarios of changing leverage:

Table 3 - Statistical results (FL in case 1) (source: VN stock exchange 2012)

Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference
MAX	2,159	1,592	0,5669
MIN	0,546	0,119	0,4268
MEAN	1,050	0,574	0,4767
VAR	0,2332	0,1694	0,0638
Note: Sample size : 10			

Table 4 – Statistical results (FL in case 2) (source: VN stock exchange 2012)

Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference
MAX	2,159	1,705	0,4535
MIN	0,297	0,244	0,0533
MEAN	1,001	0,630	0,3707
VAR	0,2649	0,1638	0,1010
Note: Sample size : 10			

Table 5- Statistical results (FL in case 3) (source: VN stock exchange 2012)

Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference
MAX	2,159	1,592	0,5669
MIN	0,346	0,119	0,2269
MEAN	0,985	0,517	0,4679
VAR	0,2737	0,1618	0,1118
Note: Sample size : 10			

Based on the calculated results, we find out:

First of all, Equity beta mean values in all 3 scenarios are acceptable (< 1) and asset beta mean values are also small (In the case of reported leverage in 2011, equity beta max is 2,159 which is little high in a few exceptional ca competitor size doubles, asset beta max expands from 1,592 to 1,705. Finally, when competitor size is slightly smaller beta max reduces to the initial value of 1,592.

The below chart 1 shows us : when competitive firm size decreases slightly, average equity beta value decrease more (compared to that at the initial selected competitor (1,050). Next, average asset beta decreases little (to 0,517). How case the competitor size doubles, the risk level of the selected firms decreases little (1,001). Last but not least, the fluct of equity beta value (0,265) in the case of doubling size competitors is higher than (>) the results in the rest 2 cases. A could note that in the case competitor size slightly smaller, the risk is more dispersed (0,274).

Chart 1 – Comparing statistical results of equity beta var and mean in three (3) scenarios of changing competitor size (source: VN stock exchange 2012)

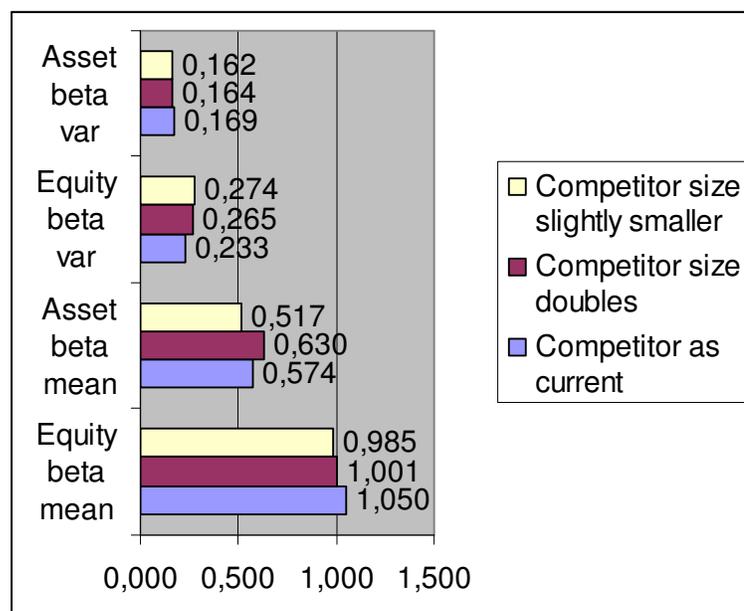
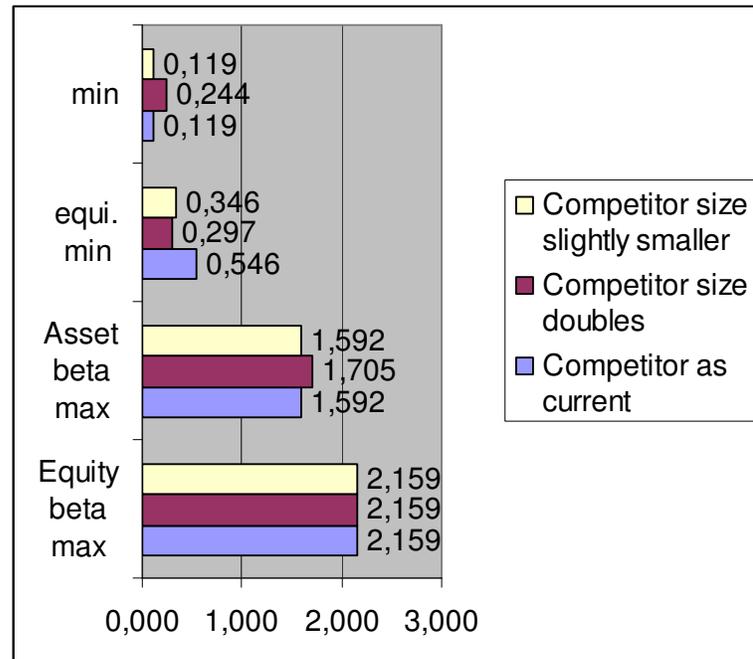


Chart 2 – Comparing statistical results of equity/asset beta max and min in three (3) scenarios of changing competitor size (source: VN stock exchange 2012)



9. Risk analysis

Generally speaking, during the financial crisis 2007-2011, esp. the period 2007-2009, the investment and finance industry can survive well and maintain the development and profits, although these firms have to face other kinds of risks: materials or water or electric prices increasing. These risks can affect the operating cash flow of these companies.

10. Discussion

Table 1 shows us there are 60%, 70% of firms having acceptable beta values ($0 < \text{beta} < 1$) in cases : current or doubling size competitors. If competitor size is smaller, this number maintains at 70%. Moreover, chart 2 tells us that asset beta min increases to 0,244 in case doubling size competitors.

Looking at exhibit 5, it is noted that comparing to beta results of electronic and electrical industry in the period 2007-2011, asset beta mean of investment and finance industry group during 2007-2011 is higher in current situation (0,574) and in the other 2 cases. And the risk dispersion in investment and finance industry when competitor size is smaller during 2007-2011 (shown by asset beta var of 0,162) is also higher than that in electronic

and electrical industries (0,06).

11. Conclusion and Policy suggestion

In conclusion, the government has to consider the impacts on the mobility of capital in the markets when it changes the macro policies and the legal system and regulation for developing the investment and finance market. The Ministry of Finance continues to increase the effectiveness of fiscal policies and tax policies which are needed to combine with other macro policies at the same time. The State Bank of Viet Nam continues to increase the effectiveness of capital providing channels for investment and finance companies as we could note that in this study when competitive firm size doubles, the risk level increases (asset beta mean value is estimated at: 0,63), and the equity beta var value (0,265) is little higher than that in case competitor size as current (0,233).

Furthermore, the entire efforts among many different government bodies need to be coordinated.

Finally, this paper suggests implications for further research and policy suggestion for the Viet Nam government and relevant organizations, economists and investors from current market conditions.

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Exhibit

Exhibit 1 – Inflation, GDP growth and macroeconomics factors

(source: Viet Nam commercial banks and economic statistical bureau)

Year	Inflation	GDP	USD/VND rate
2011	18%	5,89%	20.670
2010	11,75%	6,5%	19.495
	(Estimated at Dec 2010)	(expected)	
2009	6,88%	5,2%	17.000
2008	22%	6,23%	17.700
2007	12,63%	8,44%	16.132
2006	6,6%	8,17%	
2005	8,4%		
Note		approximately	

Exhibit 2 – Market risk of listed companies on VN investment and finance industry market under one factor model (case 1) (source: VN stock exchange 2012)

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)	Note	Financial leverage (F.S reports)
1	AGR	1,370	0,313		77,2%
2	APG	0,648	0,630	CLS as comparable	2,8%
3	APS	0,895	0,382		57,4%
4	AVS	0,546	0,425	CLS as comparable	22,1%
5	BSI	1,125	0,873	AGR as comparable	22,4%
6	BVS	2,159	1,592		26,3%
7	CLS	0,662	0,331		50,0%
8	CTS	0,812	0,546		32,8%

9	PVF	1,365	0,119		91,3%
10	VNR	0,922	0,525		43,0%
				Average	42,52%

Exhibit 3 - Market risks of listed investment and finance industry firms under one factor model (case 2) (source: VN stock exchange 2012)

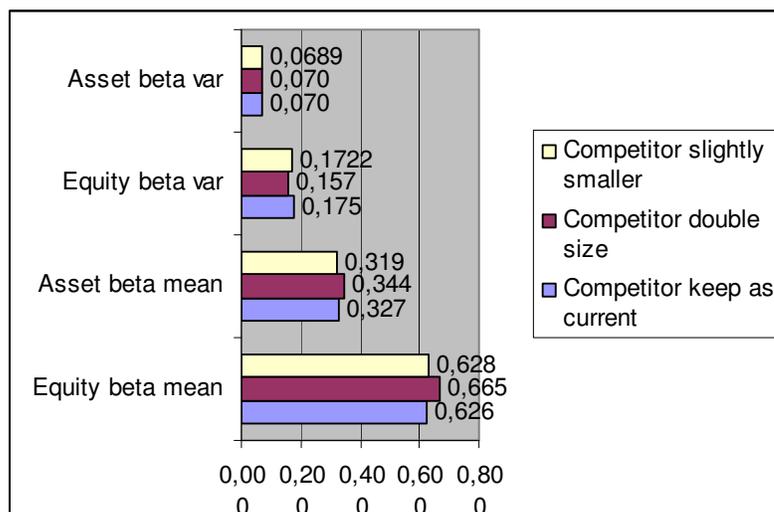
Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)	Note
1	AGR	1,370	0,313	
2	APG	0,346	0,336	ASIAGF as comparable
3	APS	0,895	0,382	
4	AVS	0,546	0,425	CLS as comparable
5	BSI	0,770	0,597	PVI as comparable
6	BVS	2,159	1,592	
7	CLS	0,662	0,331	
8	CTS	0,812	0,546	
9	PVF	1,365	0,119	
10	VNR	0,922	0,525	

Exhibit 4 – Market risk of listed investment and finance industry firms under one factor model (case 3) (source: VN stock exchange 2012)

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)	Note
1	AGR	1,370	0,524	
2	APG	0,758	0,741	AVS as comparable
3	APS	0,895	0,484	
4	AVS	0,771	0,635	APS as comparable
5	BSI	0,297	0,244	HBB as comparable
6	BVS	2,159	1,705	
7	CLS	0,662	0,397	

8	CTS	0,812	0,599	
9	PVF	1,365	0,368	
10	VNR	0,922	0,604	

Exhibit 5 – Comparing statistical results of equity beta var and mean in three (3) scenarios of changing competitor size in 18 listed commercial electric firms 2007-2011 (*source: VN stock exchange 2012*)



Strategic Management Approach to Deal with Mergers in the era of Globalization

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Abstract-In this paper we have discussed the strategic implications when undergoing a merger in the globalized world. Business Mergers in the corporate world are achieving increasing significance and attention especially in the advent of extreme globalization. This is obvious from the magnitude and growth of deal values and resultant ‘mega-mergers’ transacted in recent times. On the global stage, competitive advantages are gained by creating, transferring and exploiting capabilities across operations and locations internationally. In result, companies are redesigning their strategies to focus on core businesses, yet with a global scope. This paper also outlines the role of corporation’s strategic management in making strategies for dealing with mergers on the global stage. Impact of corporate culture on mergers has been examined as it is the most important success factor of a merger. Statistical evidence has been reviewed to know about the latest trend of mergers.

Key Words- Globalization, Competitive Advantages, Strategic Management, Mergers

1. Introduction

Companies which need to be competitive, initiate to come up with “a global market” idea instead of a national market. Globalization has created a tremendously competitive business environment across the world. With the globalization of more industries, strategic management is becoming gradually an important way to track of international developments and position a company for long-term competitive advantage. Companies are constantly pressed to increase profits and shareholder value. They intensely search for ways to grow. Mergers have been a preferred technique of increasing growth and accomplishing target improvements in revenue for companies around the world. [1]

1.1 Strategic Management

Kenneth Andrews comments that ‘Strategy is the pattern of decisions in a company that determines and

reveals its objectives, purposes or goals, produces the principal policies and plans for achieving those goals, and defines the

range of business the company is to pursue, the kind of economic or human organization it is or intends to be and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers and communities. Strategic Management is concerned with the character and direction of the enterprise as a whole. It is concerned with basic decisions about what the enterprise is now, and what it is to be in future. It determines the purpose of the enterprise. It provides the framework for decisions about people, leadership, customers, risk, finance, resources, products, systems, technologies, location, competition and time. [2]

1.2 Globalization

At the beginning of the 20th century the phenomenon of globalization accelerated by the advances in technology has led to the emergence of economically, politically and socially important developments all over the world. The World is under the influence of a trend that seems impossible to avoid called “globalization” whether regarded positively or negatively, even though many opinion about the effects, the emergence and content. One of the most important expansions which are induced by globalization is change in the ways of doing business. Businesses are forced to follow an effective growth strategy to get a share from markets where increasingly intense of competition, especially from the result of globalization and technological advances.

1.2.1 The Concept of Globalization

“Globalization is the process of change seen as increasing interdependence, integration and interaction among people and companies in disparate locations around the globe.”

The most common use of Globalization is closely related to the concept of “international relations”. In this sense, globalization means dependence and increasing their relationships between each other of different countries and people living in these different countries. About 500 years, cross - border relations are carried out since the emergence of state systems even the cross-border relations are increased in recent years. However, if uses in a manner which “ascribe order and a new process directed by connection that combined large part of social life, national cultures , national economies and national borders that have been resolved”, without limiting the concept by cross - border relations , the meaning of related to will be undisclosed with the concept of international relations. [3]

Globalization strategies take different forms for different companies:

- Multinational – companies with specific strategies for each different country
- Transnational – companies with strategies to gain worldwide efficiency and local advantages
- International – companies with a global strategy but with local adaptations
- Worldwide –companies with a “one -size -fits -all” strategy in all countries [4]

2. Mergers

The phenomenon of mergers has established to become a highly popular form of corporate development to create growth and diversity. Mergers are an important part of both healthy and weak economies and are often the primary way in which companies are able to provide returns to their investors, stakeholders and owners.

In a merger, the corporations come together to combine and share their resources to achieve common objectives. The

shareholders of the combining firms often remain as joint owners of the combined entity. Merger appears to be a great effort by two firms to unite into one corporate entity with a common vision, mission and objectives. The underlying purpose is to go for a revolutionary change in both of their operating performance by way of making stronger competitive strengths and synergies. [5]

To end up the word MERGER may be taken as abbreviation which means:

M-- Mixing, E-- Entities, R-- Resources for, G-- Growth, E-- Enrichment and R—Renovation[6]

2.1 Types of Mergers

Mergers can be categorized into three different types:

2.1.1 Vertical Mergers

Vertical mergers are combinations of firms that have a buyer-seller relationship or are symbiotically related. These mergers occur when companies that are involved in related functions but at different phases in the production process merge with one another.

2.1.2 Horizontal Mergers

Horizontal mergers, occurs when companies performing similar functions merge to increase the scale of their operations. Horizontal mergers are firmly controlled by governments because of the adverse effects on competition. BMW- Rover, VW- Rolls- Royce and Daimler Chrysler merger are the horizontal mergers in the automotive industry.

2.1.3 Diversification/Conglomerate Mergers

Diversification occur when one company acquire one or more companies that are neither exchange partners nor similar companies competing with each other, but companies operating in different areas. The extreme form of diversification is the conglomerate. [7][5]

2.2 The Main Objective of Mergers

- Proper use of all available resources.
- To prevent exploitation of unutilized and underutilized assets and resources.
- Forming a strong human base.
- Reducing tax burden.
- Improving profits.
- Eliminating or limiting the competition.
- Achieving savings in monitoring costs. [8]

3. Literature Review

Merger is a strategy through which two or more companies agree to assimilate their operations on relatively co-equal basis. [9] The business notion of concentrating on local markets, what was further strengthened by the gradually changing locally typically technologies and local standards is recently replaced by paradigm shift (like separation to integration, local standard to world standard etc.) due to globalization. Globalization requires top management to the development of global competitive and adaptive strategies on all levels. [10] Common motivation for merger includes synergy, (operating synergy and financial synergy), diversification (new product/ new market, Current product/ new market), Strategic realignment (Technological, political change), tax consideration, market power, and misevaluation. [11] A business combination is one of the most preferred

growth strategies on the basis of all the assets and liabilities in a common pool to create a synergy of two or more activities of the entity. It can be said that to maintain the activities of the competitors together by joining forces create a positive impact on competitive advantage [12]. Merger is a risky way to growth, but there are some factors which give rise to the successful merger strategy operating synergy (effects on enhancing value, human access human capital, skills, expansion of product profit maximization), Financial Synergy (effects on cost efficiency), increased market power (effect on anti-competitive effects) [13]. There are also problems related to mergers which includes inspection problem as most of the cases buyer has less information than the buyer. Negotiation problem, negotiation cross borders is extremely complex problem. It becomes more difficult because of lack of information and cultural differences. Integration problem, integrating the merging firm is a process fraught with difficulty. One survey found that one third of all merger failure was due to integration problem. [14]

4.Impact of Corporate Culture on Mergers

Mergers are one of the fastest strategic options that companies choose to face the global competitive market. The merging companies have to face the issue of cultural differences which is one of the common reasons of mergers failure, reinforced when it comes to cross-borders combinations. Indeed, both partners incorporate in the new merged company the national and the corporate cultures. So, in order to be successful, the leaders have to consider the significance and the influence of these issues accurately during the post-merger integration process; at the same level as the synergies, business performance and profit improvement.

When two different companies with different backgrounds, histories and ways of working get together the cultural change might happen. The acquiring company has to capture the full value of the merger by integrating carefully each element of both organizations. The development of a new and shared culture is one of the critical factors for merger success. So, the initial challenge for all organizations which consider a merger or acquisition is to understand that the culture has deep roots that cannot be easily pulled out, examined and reprogrammed to create a new shared culture. Creating a shared culture involves careful discovery, inventing, reseeding and letting go.

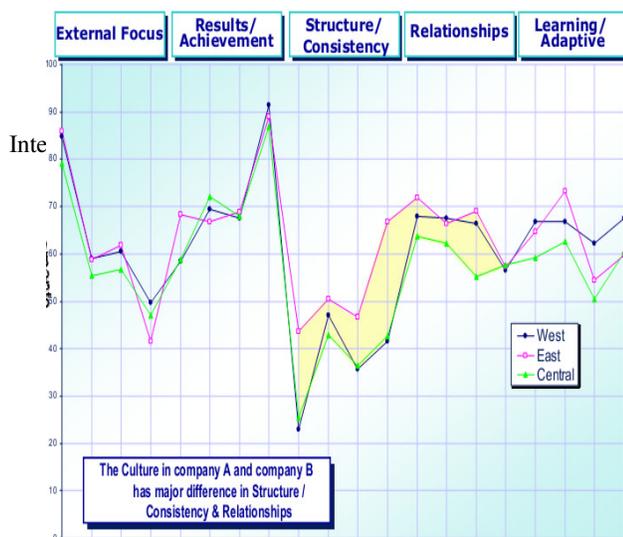
Figure 1: Identify cultural differences and formulate a desired state

Source: The Role of Corporate Culture within Successful Globalization Strategies

Additionally, there is no need to argue for the importance of corporate culture on organizational behavior and performance. Researchers have (e.g. Bennis and Nanus 2003, Shein 1999) argued extensively for corporate culture as the crucial factor for successful organizational development during mergers and acquisitions. The corporate culture needs careful attention - establishing the correct and appropriate corporate culture is an essential process of managing an organization. (Bono and Heller, 2008). [15]

In the Compaq and HP merger, Barbara Braun, the vice president for merger integration at HP said:

“ The easiest thing to do with culture is to simply chose one company’s culture as dominant” , “However , we believed it was important to get the best of both H P ’s engineering culture and Compaq’s marketing culture . We wanted to blend the best of both cultures to create a new culture for the merged company. ”[16]



5. Case Studies In Terms of Success and Failure Of Mergers

5.1 A Case of Successful Merger: CloettaFazer

Cloetta was founded 1862 in Copenhagen by the three brothers Christoffer, Nutin and Bernhard Cloetta from Switzerland. In 1891, Karl Fazer opened his French-Russian bakery in Helsinki, to finally in 1897; start with the industrial production of the confectionary. Swedish Cloetta and Finish FazerKonfektyr then merged on the 1st of January 2000. Cloetta Frazer’s mission is to create joy and delight, to all people, no matter age or preference in taste, shall delighted of the company’s wide assortment of chocolate and confectionary.

CloettaFazer recognized the importance of organizational culture in accomplishing all functions and the merger work. CloettaFazer did not see the culture differences as a big threat to developing the structure of the organization, as people find each other no matter if they come from India, England or Sweden, since you have to work in common. The merger success met by CloettaFazer is not hazardous; several factors were in favor for the integration process. First of all, both companies were considered as equal during the merger, there was no attempt to take over the control of the new organization. The deal was clear for both companies. Also, the pre-merger has been conscientiously prepared from both sides. They studied carefully each department in order to depict the realizable opportunities and to achieve the possible synergies. Furthermore, CloettaFazer created a corporate identity which characterizes, partly, the corporate culture. Therefore, each employee could refer to the new shared values. People were aware of the existence of a new corporate culture with new vision and direction. Plus, CloettaFazer recognized the importance of the human factor by identifying the different competencies and the key individuals in order to integrate them efficiently. Also, the social issues were handled in a peaceful atmosphere and both sides were able to compromise when necessary. Similarly, they planned conferences between top-executives to first highlight the best practices from both sides that existed before the merger and then to understand why they were better in that field. These practices werethen implemented in the whole organization.

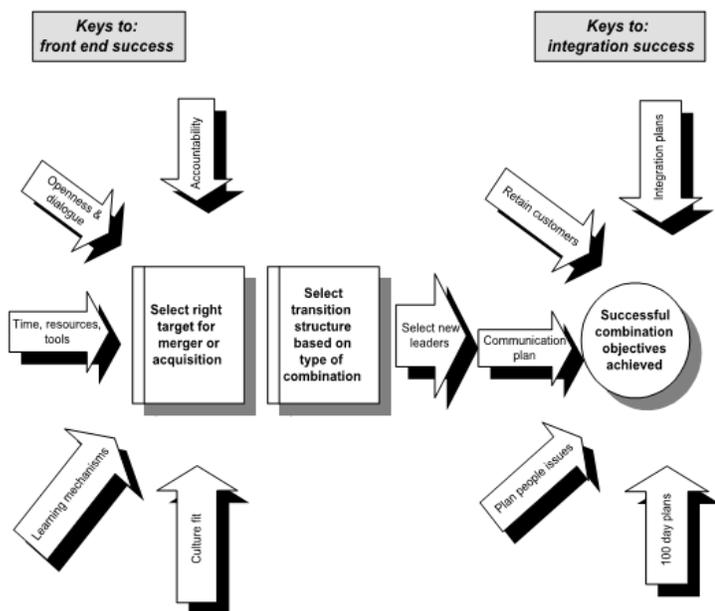
5.2 A Case of Merger Failure: DaimlerChrysler

The DaimlerChrysler merger was announced on the 7th of May 1998 after a \$38 billion stock deal. The merger was announced as “a merger of equal”. Daimler-Benz CEO Jürgen Schrempp hailed the union as “a merger of equals, a merger of growth, and a merger of unprecedented strength” and was supposed to be successful. Indeed, the combination between the largest industrial company in Europe and one of the biggest American corporation represented the largest industrial Trans-Atlantic merger in history with an annual output of over \$ 130 billion. The company DaimlerChrysler would be incorporated in Germany with two headquarters in Stuttgart and Michigan. Chrysler Corporation, located in Michigan, USA, is an American automobile manufacturer that has been founded in 1925 by Walter P. Chrysler. On the other hand, Daimler AG, located in Stuttgart, Germany, is a German car corporation specialized in luxury cars with several other activities.

The heavy presence of cultural conflicts and differences which leaders left aside and problems between both managements did

not help the company to reach the initial goals. However, the dominant pitfall was that the merger between Daimler and Chrysler “was never truly a marriage of equals” while the Chrysler’s management had trust blindly in the merger of equals and did not realize the attempt of Daimler to take over the entire organization. This aspect of the DaimlerChrysler merger has truly affected the success of the merger; it had created an untrusting atmosphere and locked the Chrysler employee’s involvement in the cultural integration. Consequently, leaders have not taken into account this human factor and have left their anxiousness, fears and concerns without any concrete measure. Then, the national culture had also played a major role in the merger failure as the corporate cultures are influenced and driven by the country’s culture. As Kruckeberg (2000) mentions “it is dangerous to underestimate culture issues in any merger, but when the merger involves two companies from different national cultures, those issues are exacerbate and unless a company is prepared they can be debilitating” (Ibid, pg. 25) which was the case for Daimler-Chrysler. Indeed, Daimler-Chrysler did not study the possible source of cultural clashes. Also, the German’s lack of integrity from taking the cultural mismatches into consideration led the company to the failure. Daimler had rather impose its own culture on the entire group. [17]

6. Strategies That Make A Merger Successful



Each merger is a strategic initiative that needs thoughtful implementation planning, management, and resources. Mergers of any scale are difficult, primarily because of people, technology, and culture. Creating a dynamic strategic vision, supported from the top to the bottom and across silos, requires integrated participation at all levels of the organization. [18]

The more similar the firm - level strategies of two merging companies (growth, R&D, management), the more likely the merger will be successful. [19]

Figure 2: A systems approach to successful mergers and acquisitions

Source: Making mergers and acquisitions work, 2002

A strategy is an integrated and synchronized set of commitments and actions intended to exploit essential competencies and gain a competitive advantage. When selecting a strategy, companies make choices between competing alternatives. In this sense, the chosen strategy specifies what the firm intends to do as well as what it does not intend to do. Moreover, effective due-diligence processes including the deliberate and careful selection of target companies and an assessment of the relative health of those companies (cultural fit, financial health and the importance of human resources) contribute to successful mergers.

6.1 Pre-Merger Integration Planning

The better the strategic fit between the two corporations, the easier to be successful. The pre-planning phase and screening is a critical success aspect for mergers. The more planning prior to mergers is better, since the pre-planning phase will affect all

business zones and how the integration is handled. It is vital that the merger -planning has a clear understanding of the acquired company's role in the strategy after the merger. The proposition advocates that the more alike the corporations' strategies are, the more likely the merger will be successful. Failures in mergers can be caused by the lack of consideration of different features in the pre -merger phase. Management objectives could therefore also be a significant firm-level factor in the analysis.

6.2 Post-Merger Integration Process

Signing the merger contract and the change in ownership prompts changes in organization and leadership. Now is the time that a new organization should be placed, appoint new management, and make sure that key talent is retained. [20]

6.2.1 Building the New Culture

The organizational culture plays an important role during mergers as the managerial styles, organizational practices and structures to a great extent are determined by the organizational culture. The new organization will have a culture, whether it is by default or by design a culture that may be marked by conflict or a culture that may be strongly accepted. The procedure of building the new culture goes on long after the combination phase. Enterprises should openly discuss their respective business cultures to determine whether a suitable fit is even possible. Differences must be recognized, accepted and should be dealt.

6.2.2 Communication

Communication is always a important part of any process of change, but it is critical in cross-border merger because misunderstandings owing to cultural differences and distance may exaggerate tensions. During the merger clearly defined communication strategy plays an important role in eliminating the employee fears and kill rumors floating around in the organization. The employees meeting in small groups so as to discuss their fears concerns and positive feelings also aids to decrease the stress on acquired firmemployees. An atmosphere of mutual trust is built as this provides confidence to employees that the new management is ready to listen to their concerns and feelings. The transition period also becomes vital from communication point of view. In lengthy transition period case the employee stress increases, to convince the employees that they are part of new organization and their concerns will be taken care is the best strategy in this period. The transition period provides ample opportunity to design the new organization, explain the employees new roles, plan synergies and train the employees as the new role. This makes the integration process easier for both of the merging organizations.



6.2.3 Retaining Talent

Frequently, some of the existing and acquired talent is inadequate. Management capabilities needed for the new organization must be proactively recognized and recruited. Being reactive makes it harder, and at times impossible, to be effective in time to save the merger. The beginning point for talent identification is the map of talent developed during the due diligence stage, and this map needs to be polished quickly using feedback from direct superiors, peers, and subordinates, past performance

reviews, personal inter-views, formal skill assessments, and direct evaluation of performance during the integration period. Fast and open communication is vital to retain talent. Financial motivation is also a tool for talent retention.

6.2.4 Research and Development

Another element of successful merger strategies is an emphasis on innovation, as demonstrated by continuing investments in R&D activities. Important R&D investments indicate a strong management commitment to innovation, R&D is increasingly important to overall competitiveness, as well as merger success. [21]

Figure 3: The Wheel of Fortune at General Electric

Source:Source:R. N. Ashkenas, L. J. DeMonaco, and S. C. Francis, “Making the Deal Real: How GE Capital Integrates Acquisition, Harvard Business Review,January–February 1998, p. 167.

7. Globalization of Cross-Borders Mergers

The globalization of business over the last 20 years has seen companies search out new markets in order to grow and maintain their competitive advantage. This globalization has been accompanied by a surge in cross-border mergers. Firms engage in cross-border mergers activity for several reasons: among them, to strengthen their market position, expand their businesses, seek useful resources such as complementary intangible assets or realize efficiency gains by restructuring their businesses on a global basis. Mergers enable firms to quickly realize new market opportunities and establish an immediate critical mass in a particular market. They can also serve to eliminate actual or potential competitors which, at the international level, are becoming more important as barriers to trade and investment fall.

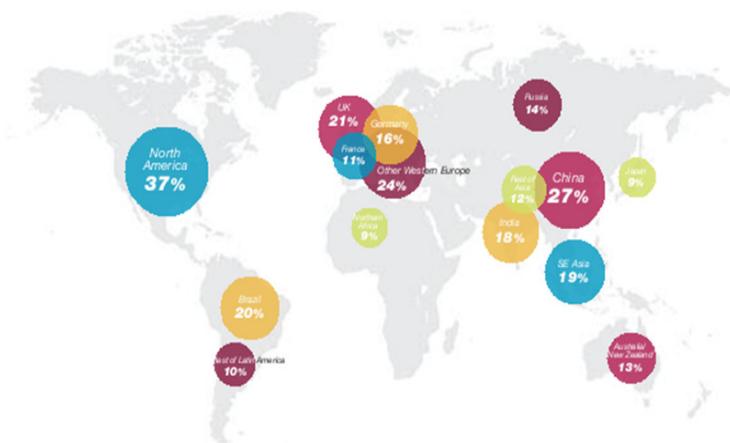


Figure 4:Top 15 countries and regions that are considered prime opportunities for M&A activity

Source: Cross-border M&A:Perspectives on a changing world, 2011

Technological change works both as a pull and push factor for cross-border mergers: by promoting international expansion through falling communication and transport costs; by creating new businesses and markets; by rapidly changing market conditions; or by increasing the costs of research and development. Technical competence and market know-how,

flexibility and ability to innovate increasingly are becoming corporate strategic assets, while at the same time the speed of technological development is pressing on. Companies are being forced to look for partners from whom intangible assets such as these can be obtained and absorbed. In addition, government policies such as liberalization, privatization and regulatory

reform influence cross-border unions by opening up opportunities and increasing the availability of favorable mergers targets. [22]

It can be analyzed that companies who have followed strategic measures in global mergers are more successful. Mergers result in failures when management is unable to organize activities in a strategic sound manner.

Therefore organizations seeking mergers in the globalized era are required to formulate strategic planning and operations to render smooth operations

Global deal activity this quarter was 34% higher compared to the same quarter last year with \$719 billion in deal volume versus \$537 billion. The deal volume this quarter was the highest since the third quarter of 2008.



Figure 5: Global M&A Quarterly Volume
Source: Global Financial Advisory Mergers & Acquisitions Rankings, 2012

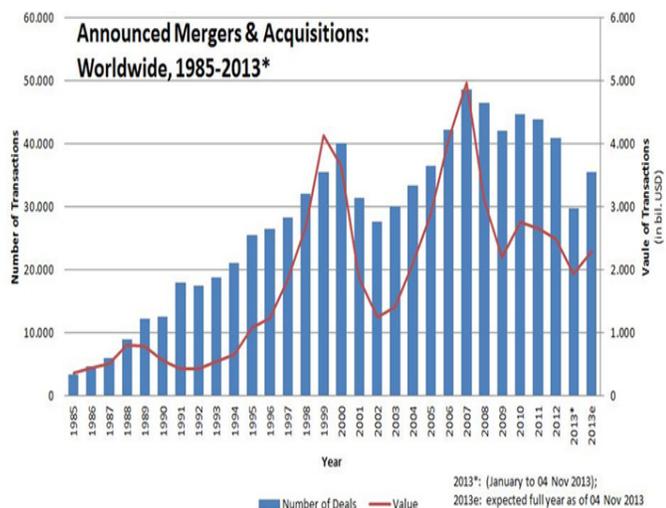


Figure 6: Global M&A Activity
Source: Global Financial Advisory Mergers & Acquisitions Rankings, 2012

Regional Breakdown by Target Region/Country

REGION	2012		2011		VOLUME CHANGE
	VOLUME USD (Mn)	DEAL COUNT	VOLUME USD (Mn)	DEAL COUNT	
Americas	\$1,091,450	12,931	\$1,234,524	12,748	-11.59%
Latin America	\$110,680	1,018	\$133,225	1,092	-16.92%
North America	\$1,009,995	12,017	\$1,120,530	11,759	-9.86%
Canada	\$126,219	1,543	\$102,688	1,507	22.94%
United States	\$849,366	10,295	\$991,142	10,059	-14.30%
EMEA	\$637,099	6,349	\$671,749	7,065	-5.16%
Eastern Europe	\$114,599	751	\$89,480	904	28.07%
Western Europe	\$467,644	5,009	\$540,733	5,457	-13.52%
UK	\$183,540	1,836	\$130,074	1,815	41.10%
Germany	\$59,836	719	\$49,573	836	20.70%
France	\$32,922	494	\$95,627	751	-65.57%
Asia-Pacific ex-Japan	\$404,861	6,244	\$403,361	7,055	0.37%
Australia	\$57,797	847	\$100,528	962	-42.51%
New Zealand	\$4,378	126	\$4,388	94	-0.22%
China	\$133,996	2,348	\$115,100	2,761	16.42%
Hong Kong	\$18,802	350	\$30,272	493	-37.89%
South East Asia	\$97,497	965	\$65,627	1,039	48.56%
India	\$33,199	689	\$27,213	702	22.00%
Japan	\$91,554	1,597	\$103,905	1,432	-11.89%
Global	\$2,227,021	27,291	\$2,416,646	28,436	-7.81%

Conclusion

With the rise in the business competition all over the world, companies try to find new ways of growing business. Business merger is one of the strategic tools the companies consider to grow their business. Merger activity has grown steadily over the last decade. In the era of globalization companies prefer to do cross border merger activity instead of domestic merger. But handling cross border merger activity is difficult as companies have to face many problems like cultural differences, difference in technology and many people related issues. The companies should do the pre-merger planning in which they have to think that what kind of company they are looking for, what are their future plans, the company they are targeting would be beneficial for them in the long run or not. After the merger the companies have to do post-merger integration in order to eliminate any kind of differences between the two companies and their people. Both the pre-merger planning and post-merger integration will make a merger successful.

, No.3, 2014

Figure 7: Announced M&A: Worldwide, 1985-2013

Source: Institute of Mergers, Acquisitions and Alliances

Table: The Top Worldwide Deals (Largest M&A Transactions)

Source: Institute of Mergers, Acquisitions and Alliances

Rank	Year	Acquirer	Target	Transaction Value	
				(in bil. USD)	(in bil. EUR)
1999	Vodafone	Mannesmann	202.8	204.8	
	AirTouch PLC	AG			
2000	America	Time Warner	164.7	160.7	
	Online Inc				
2007		Philip Morris	107.6	68.1	
	Shareholders	Intl Inc			
2007	RFS	ABN-AMRO	98.2	71.3	
	Holdings BV	Holding NV			
1999	Pfizer Inc	Warner-Lambert	89.2	84.9	
		Co			
1998	Exxon	Mobil Corp	78.9	68.4	
	Corp				
2000		SmithKline	76.0	74.9	
	GlaxoWell	Beecham PLC			
	come PLC				
2004	Royal	Shell Transport	74.6	58.5	
	Dutch Petroleum	& Trading Co			
	Co				
2006	AT&T Inc	BellSouth Corp	72.7	60.2	
1998	Travelers	Citicorp	72.6	67.2	
	Group Inc				

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MEASURING THE PERFORMANCE OF BANKS: AN APPLICATION OF ANALYTIC HIERARCHY PROCESS MODEL

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ABSTRACT

The current study aims to develop a conceptual model for measuring the performance of the banks which includes both the financial as well as human aspect. The hierarchy of dimensions of performance has been created in the study. An attempt has also been made to measure the importance of the various dimensions of the performance of the banks using Analytic Hierarchy Process model. On the basis of banking experts' responses, it can be concluded from the study that human aspect is more important than financial aspect while measuring the performance of the banks. Under human aspect the corporate social responsibility is more important than customer satisfaction and employee satisfaction.

KEYWORDS: Banks, Analytic Hierarchy Process, Financial aspect, Corporate social responsibility, Customer satisfaction, Performance.

1.INTRODUCTION

Indian banking sector has emerged as one of the strongest drivers of India's economic growth. Positive changes witnessed in the last two decades have impacted every aspect of banking, ranging from regulatory standards to customer management. Indian banks adapting to the changing landscape along with the vision of the regulator and the Government in shaping the future growth of banking were two of the noteworthy

features of this transition [1]. The Indian banking system is among the healthier performers in the world, when compared with top three banks in total assets and in terms of return on assets. This sector is tremendously competitive and recorded as growing in the right trend [2]. The policy makers, which comprise the Reserve Bank of India (RBI), Ministry of Finance and related government and financial sector regulatory entities, have made several notable efforts to improve regulation in the sector. The banking sector now compares favourably with other sectors in the region on metrics like growth and profitability. While banks evolved their strategies in response to increasing competition and changing customer requirements, the regulator guided its growth with policies of gradual liberalisation and benchmarking the domestic system with the best in the world [3]. As the world recovers from the global financial crisis, Indian banking has remained resilient while continuing to provide growth opportunities. India has by-and-large been spared of global financial contagion due to the subprime turmoil for a variety of reasons. India's growth process has been largely domestic demand driven and its reliance on foreign savings has remained around 1.5 per cent in recent period. It also has a very comfortable level of foreign exchange reserves. The credit derivatives market is in an embryonic stage; the originate-to-distribute model in India is not comparable to the ones prevailing in advanced markets; there are restrictions on investments by residents in such products issued abroad; and regulatory guidelines on securitisation do not permit immediate profit recognition. Financial stability in India has been achieved through perseverance of prudential policies which prevent institutions from excessive risk taking, and financial markets from becoming extremely volatile and turbulent [4] [5].

With the increased participation of new private sector and foreign banks, the Indian banking industry has become fiercely competitive. Competition will be further intensified with the proposed entry of new private players and non banking financial companies (NBFCs). A few banks have established an outstanding track record of innovation, growth and value creation, reflected in their market valuation [6]. The changed competition and accounting environment compelled the commercial banks to provide unprecedented attention to cost cutting and supplementing fund-based income by fee-based income [7]. Commercial banks lending and deposit taking business has declined in recent years. Deregulation and new technology have

eroded bank's comparative advantages and made it easier for non bank competitors to enter these markets. In response, banks have shifted their sales mix towards noninterest income-by selling fee based financial services such as mutual funds, by charging fees for services that used to be bundled together with deposit or loan products. Earnings from fee based products are more stable than loan based earnings and fee based activities reduce bank risk via diversification [8]. The cost of banking intermediation in India is higher and bank penetration is far lower than in other markets. India's banking industry must strengthen itself significantly if it has to support the modern and vibrant economy which India aspires to be. While the onus for this change lies mainly with bank managements, an enabling policy and regulatory framework will also be critical to their success [9].

A diverse range of various studies have been conducted by the researchers for measuring the performance of the banks, which present different perspective with regards to the performance of the banks in different countries. Traditional systems of performance evaluations of banks mostly uses the factors like return on assets (ROA) and return on investments (ROI) for measuring the financial performance of the banks. But today, intellectuals and managers of organization find that traditional systems of performance evaluation having been typically based on financial views are incomplete in evaluating overall Performance of organization and presenting effective feedback [10]. Using criterions as ROA/ROI or financial measurements present summary of organization's activities in last period only, even by presentation of the best sample of performance results, it does not ensure the continuity of these results in the future. Excessive financial measurements may increase organization's short term profit, but bring about losing competitive situation and threatens long-term profit. Principle power of valuation in banks is in its intangible assets (knowledge and ability of personals, relationship with customers), financial aspect is not able to evaluate intangible assets [11]. Non-financial criterions like customer's satisfaction, employee's satisfaction and corporate social responsibility can be necessary for strategic success of bank [12]. Customer satisfaction is the key to the profitability of retail banking, which is having a long term financial impact on the business of the banks [13]. Performance of the banks depends upon the efficiency and level of satisfaction of its human resources. High level of human capital efficiency and employee satisfaction

leads to the high performance of the banks [14]. It has also been found by the researchers that the banks which adhere to be socially responsible in their routine activities, outperform in their financial performance. There is a positive relationship between the corporate social responsibility and the financial performance of the banks both in short and long run [15]. Thus there are two main aspects from which one can measure the overall performance of the banks, financial and human aspects. The dimensions of performance of a bank under human aspect are namely, customer satisfaction, employee satisfaction and Corporate Social Responsibility (CSR). The following conceptual model explains the performance and its dimensions.

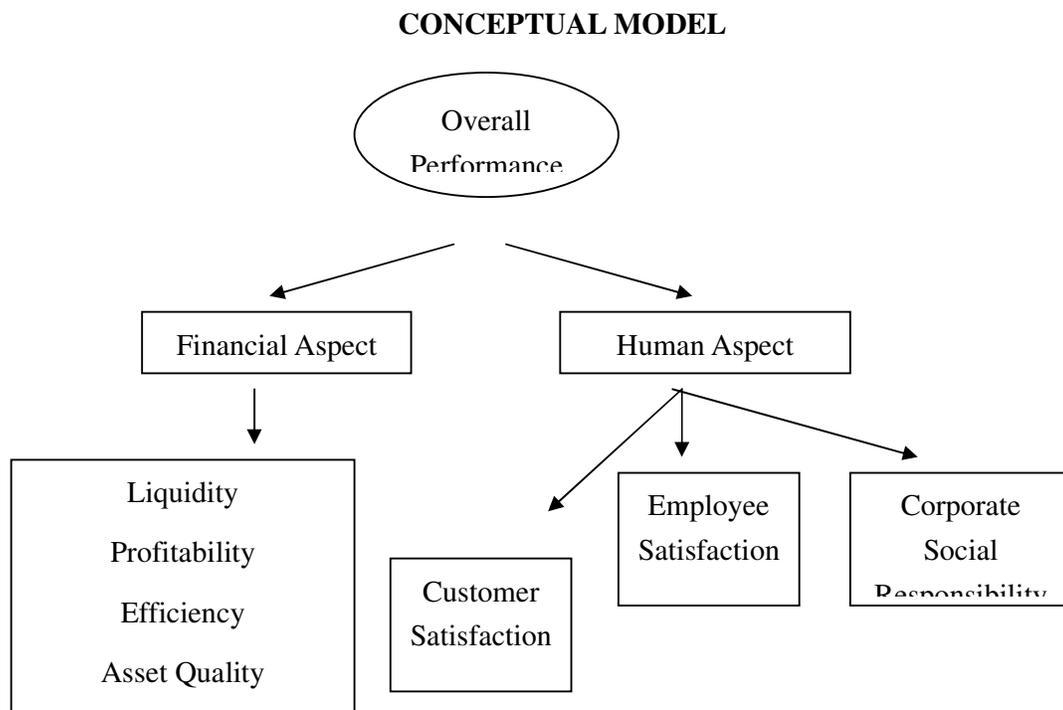


Figure 1 Conceptual Model

II. ANALYTIC HIERARCHY PROCESS MODEL

Analytic Hierarchy Process (AHP) is one of multi criteria decision making method that was originally developed by Prof. Thomas L. Saaty. It has particular application in group decision making, and is used around the world in a wide variety of decision situations, in fields such as government, business, industry,

healthcare, and education. It provides a comprehensive and rational framework for structuring a decision problem, for representing and quantifying its elements, for relating those elements to overall goals [16].

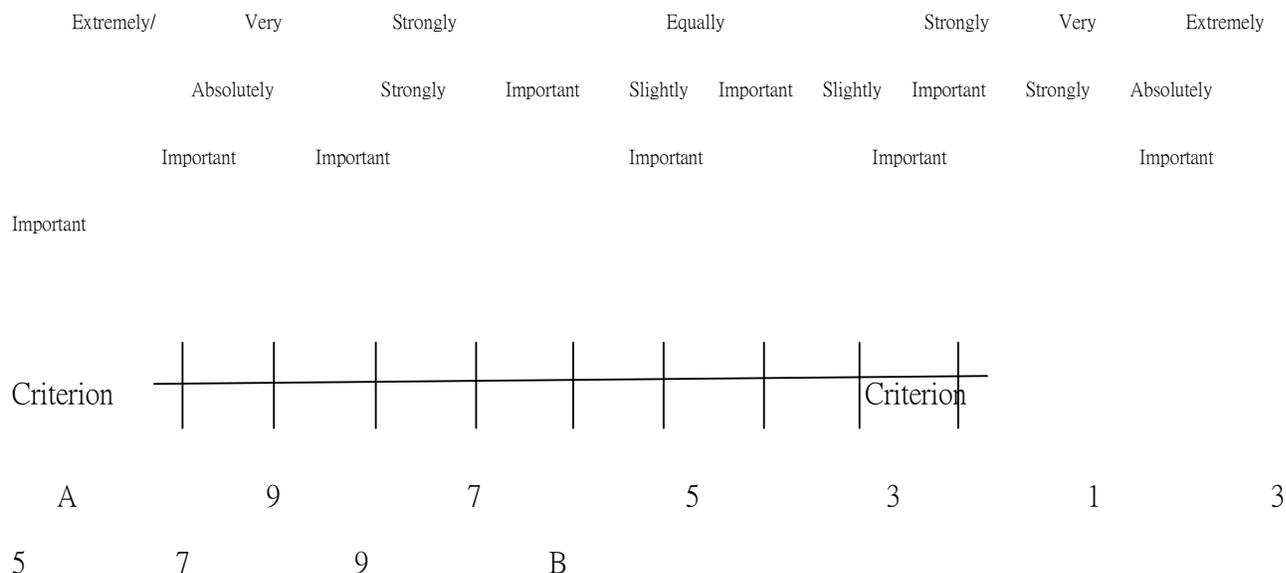
AHP application can assist managers to effectively evaluate firm's overall performance in their long-term strategic planning process even under complex economic and marketing conditions [17]. AHP is a structured method to elicit preference opinion from decision makers. Its methodological procedure can easily be incorporated into multiple objective programming formulations with interactive solution process [18]. The AHP approach involves decomposing a complex and unstructured problem into a set of components organized in a multilevel hierarchic form [19]. A salient feature of the AHP is to quantify decision makers' subjective judgments by assigning corresponding numerical values based on the relative importance of factors under consideration [20].

A huge literature is available on the applications of AHP model in different decision making problems. The Analytic Hierarchy Process has been applied by the researchers for evaluation of quantitative and qualitative factors which influence the route selection decision.

AHP is used by the researchers in the banking industries for measuring the performance of the banks by considering both the financial and non financial criterions. Quantitative criteria are financial ratios, which are related to the performance of bank's businesses. Qualitative criteria are characteristics used in the existing system for evaluation and supervision of banks [21]. The performance of Croatian banks has also been measured using AHP model and it enables the integration of the quantitative data (measured by selected financial ratios) and qualitative data by which the bank features and some internal and external environment factors are described [22]. AHP model is also used by the researchers for determining customer choice in retail banking using bank attributes and demographic factors. Researchers have also used AHP model for measuring the importance of each determinants of profitability in the commercial banks of

Malaysia [23]. Analytic Hierarchy Process (AHP) methodology is used to guide decision makers in banking industries to deal with information security policy [24]. Analytic Hierarchy Process (AHP) is used as an evaluative tool for strategic reconsolidation of capital base by Nigerian commercial banks [25]. AHP model is also used by the researchers for comparison of financial ratios of the banks [26].

AHP is one of multi criteria decision making method. It provides a comprehensive and rational framework for structuring a decision problem, for representing and quantifying its elements, for relating those elements to overall goals. Users of the AHP first decompose their decision problem into a hierarchy of more easily comprehended sub-problems, each of which can be analyzed independently. The elements of the hierarchy can relate to any aspect of the decision problem—tangible or intangible, carefully measured or roughly estimated, well- or poorly-understood—anything at all that applies to the decision at hand. Once the hierarchy is built, the decision makers systematically evaluate its various elements by comparing them to one another two at a time, with respect to their impact on an element above them in the hierarchy. In making the comparisons, the decision makers can use concrete data about the elements, but they typically use their judgments about the elements' relative meaning and importance. It is the essence of the AHP that human judgments, and not just the underlying information, can be used in performing the evaluations. The AHP converts these evaluations to numerical values that can be processed and compared over the entire range of the problem. A numerical weight or priority is derived for each element of the hierarchy, allowing diverse and often incommensurable elements to be compared to one another in a rational and consistent way. This capability distinguishes the AHP from other decision making techniques. In short, it is a method to derive ratio scales from paired comparisons. The input can be obtained from actual measurement such as price, weight etc., or from subjective opinion such as satisfaction feelings and preference. AHP allow some small inconsistency in judgment because human is not always consistent. The ratio scales are derived from the principal Eigen vectors and the consistency index is derived from the principal Eigen value. The AHP could be understood by the following example. Suppose we have two criterions A and B. The relative scale to measure how much criterion A (on the left) is important than criterion B (on the right) is as follows:



The respondents will be asked to tick one of the options on this scale. If the respondent feels that his answer is between the two options, then he may tick in between the options. The values in between such as 2,4,6,8 are intermediate values that can be used to represent shades of judgement between those five basic assessments.

III.OBJECTIVE

The main objective of the study is to determine the relative importance of all the dimensions of the performance of the banks using AHP model.

IV.RESEARCH METHODOLOGY

The study is based on the primary data collected from the experts of the banking and finance. A questionnaire (appendix-I) has been prepared for the collection of data that has been used in the AHP model – Analytic Hierarchy Process model, for assignment of weights to the different dimensions of the performance of the banks. Questionnaire has been provided to banking experts to make a peer comparison of various aspects/dimensions, which can be used for measuring the performance of the banks. Relative importance of the different aspects/dimensions of the performance has been evaluated through AHP

model. Firstly the two criteria Financial Aspect and Human Aspect were given for peer comparison by the experts. After this the sub criteria under Human aspect i.e. Corporate Social Responsibility (CSR), Customer Satisfaction (CS) and Employee Satisfaction (ES) were taken in the study for peer comparisons by the experts. Thus there are two clusters, one at criteria level (Financial vs Human Aspect) and one at sub criteria level (CSR vs CS, CS vs ES and ES vs CSR) has been used in the study.

The validity of an AHP study hinges heavily on the composition of respondents. To be valid, respondent are supposed to be fully knowledgeable with regard to the variables and how they relate to the objective. Their knowledge provides the possibility to explore the relative contribution of various dimensions to performance of banks. The collection of primary data on the importance of financial and human aspects in performance of banks has been done from thirty senior level bank employees who are of Grade 5 and above and experts in the area of banking. Convenient sampling has been used for collection of data. The list of experts from the area of banking and finance have been prepared using professional database, newspapers, magazines, and with the help of internet browser. The experts have been contacted personally, in order to explain the purpose of meeting and to get the appointments for the scheduled time for getting their responses and providing their expert advice on the research area. Thirty experts from various banks have been taken for the primary study on the basis of the experts shown their consent and gave scheduled time for responding.

V.DATA ANALYSIS AND INTERPRETATION

Data analysis using AHP model has been given in the following section. The responses of the each experts of have been given in table 1 along with the consistency ratio and geometric mean of all the responses.

Table 1: Responses of Questionnaire

Respondents	Financial Vs	Corporate Social	Corporate Social	Customer Satisfaction	Consistency Ratio

	Human Aspect	Responsibility vs Customer Satisfaction	Responsibility vs Employee Satisfaction	vs Employees Satisfaction	(%)
R1	3	2	5	3	0.42
R2	0.50	4	5	2	3.30
R3	3	4	7	3	4.56
R4	3	2	7	3	0.32
R5	1	5	7	3	9.43
R6	0.33	2	5	3	0.42
R7	2	4	3	1	2.20
R8	1	2	5	2	0.64
R9	0.50	2	5	3	0.42
R10	3	6	3	0	6.79
R11	0.33	4	7	3	4.56
R12	3	1	3	2	1.78
R13	0.50	1	3	2	1.78
R14	0.33	2	3	1	1.92
R15	0.33	3	8	4	2.44
R16	2	1	6	3	5.84
R17	1	4	6	3	7.33
R18	0.33	4	7	3	4.56
R19	1	3	5	3	4.77
R20	2	1	5	3	3.09
R21	0.33	6	3	0	2.35
R22	1	5	8	3	6.68
R23	2	3	6	3	2.35
R24	0.33	1	5	3	3.09
R25	0.5	7	5	0	9.61
R26	0.5	3	5	2	0.47
R27	1	1	7	5	1.41
R28	1	3	7	5	8.34

R29	3	2	6	5	3.40
R30	0.33	6	2	0	3.40
GEOMEAN	0.907542	2.64701	5.007231	1.965567	

Interpretation: The experts have given their responses on a scale of 1 to 9 for both the criteria. The responses in whole numbers shows that experts have preferred criteria A over criteria B and the responses in fractions shows that criteria B has been preferred over criteria A. The responses are filled by experts on the basis of their experience and subjective judgements, thus we need to check the consistency in the responses of each experts for different criteria. AHP allow some small inconsistency in judgment because human judgement might not be consistent all the time. Thus we have calculated consistency ratio for each of the experts. If the value of Consistency Ratio is smaller or equal to 10 percent, the inconsistency is acceptable. If the Consistency Ratio is greater than 10 percent, we need to revise the subjective judgment. In the above table all the consistency ratios for 30 experts are below 10 percent. Thus it can be concluded that the subjective judgements of the experts are consistent and hence acceptable for further process.

FINANCIAL ASPECT VS HUMAN ASPECT

The comparison matrix for financial aspect and human aspect is derived from the geometric mean of the responses given by all the experts is shown in equation 1.

$$\begin{bmatrix} \text{Financial vs Financial Aspect} & \text{Financial vs Human Aspect} \\ \text{Human vs Financial Aspect} & \text{Human vs Human Aspect} \end{bmatrix} = \begin{bmatrix} 1 & 0.907542 \\ \frac{1}{0.907542} & 1 \end{bmatrix}$$

Equation 1: Comparison Matrix

By using the data of comparison matrix, the normalized principal Eigen vector is calculated, which is also called priority vector. Since it is normalized, the sum of all elements in priority vector is 1. The priority vector shows relative weights among the things that we compare. Priority vector has been calculated for

deriving the relative weights of financial aspect and human aspect. Priority vector is shown in equation 2, the weight of financial aspect is found to be 0.475765 and for human aspect it is found to be 0.524235.

$$\begin{bmatrix} 1 & 0.907542 \\ \frac{1}{0.907542} & 1 \end{bmatrix} = \begin{bmatrix} 0.475765 \\ 0.524235 \end{bmatrix}$$

Equation 2: Priority Vector Matrix of Main Criteria

Interpretation: Thus it can be interpreted from the results of the priority vector matrix shown in equation 2 that financial aspect is having a weight of approx 48 percent while human aspect is having a weight of approx 52 percent in the overall performance of the banks. Thus human aspect is more important while measuring the overall performance of the banks but financial aspect is also important to be considered while measuring the overall performance of the banks because 48 percent is a significant contribution as shown by the experts on the basis of their judgements over two criterions.

CORPORATE SOCIAL RESPONSIBILITY (CSR) VS CUSTOMER SATISFACTION (CS) VS EMPLOYEE SATISFACTION (ES)

The comparison matrix for corporate social responsibility, customer satisfaction and employee satisfaction is derived from the geometric mean of the responses given by all the experts are shown in equation 3.

$$\begin{bmatrix} CSR\ vs\ CSR & CSR\ vs\ CS & CSR\ vs\ ES \\ CS\ vs\ CSR & CS\ vs\ CS & CS\ vs\ ES \\ ES\ vs\ CSR & ES\ vs\ CS & ES\ vs\ ES \end{bmatrix} = \begin{bmatrix} 1 & 2.647 & 5.007 \\ 1/2.647 & 1 & 1.966 \\ 1/5.007 & 1/1.966 & 1 \end{bmatrix}$$

Equation 3: Comparison matrix of CSR, CS and ES

By using the data of comparison matrix, the normalized principal Eigen vector is calculated, which is also called priority vector. Since it is normalized, the sum of all elements in priority vector is 1. The priority

vector shows relative weights among the things that we compare. Priority vector has been calculated for deriving the relative weights of dimensions of human aspect as, corporate social responsibility, customer satisfaction and employee satisfaction. Priority vector is shown in equation 4, the weights of CSR, CS and ES are found to be 0.632968, 0.242216, and 0.124816 respectively.

$$\begin{bmatrix} 1 & 2.647 & 5.007 \\ 1/2.647 & 1 & 1.966 \\ 1/5.007 & 1/1.966 & 1 \end{bmatrix} = \begin{bmatrix} 0.632968 \\ 0.242216 \\ 0.124816 \end{bmatrix}$$

Equation 4: Priority Vector Matrix of Sub Criteria under Human Aspect

Interpretation: Thus it can be interpreted from the results of the priority vector matrix shown in equation 4 that corporate social responsibility is having highest weightage among the three dimensions of human aspect. Corporate social responsibility which is having a weight of approx 63 percent is found to be important than customer satisfaction and employee satisfaction while Customer satisfaction having a weight of 24 percent is more important than employee satisfaction with a weight of approx 12 percent.

VI.CONCLUSION

Thus overall it can be interpreted from the results of AHP model that human aspect is more important than financial aspect in banking. While using the AHP model for sub criteria under human aspect it is found that corporate social responsibility is more important than customer satisfaction and employee satisfaction. While among two variables, customer satisfaction and employee satisfaction, customer satisfaction is more important than employee satisfaction in banks. The weights calculated for these criterion and sub criterion have been used in the following section to measure the overall performance of the banks.

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APPENDIX-I

Questionnaire for Evaluation of Degree of Contribution of Various Dimensions of Performance in the Overall Performance of the Banks

I request your participation in “*A Study on Performance of Commercial Banks*”. The study is part of my doctoral dissertation work. It is especially interested in understanding the relative importance of financial and human aspect of a bank with respect to profitability. Measuring the performance of the banks from each possible dimension is of greater importance for the nation. This study is hoped to provide understanding with regard to the degree of contribution of various dimensions of performance measurements for banks. Such an understanding will provide a guide to improve the specific areas for improvement of overall performance in the banking industry.

The results will be made publicly available and the anonymity of individual banks and individual respondents will be strictly maintained. I hereby undertake that the information collected through this questionnaire will be used for research purpose only.

(Eliza Sharma)

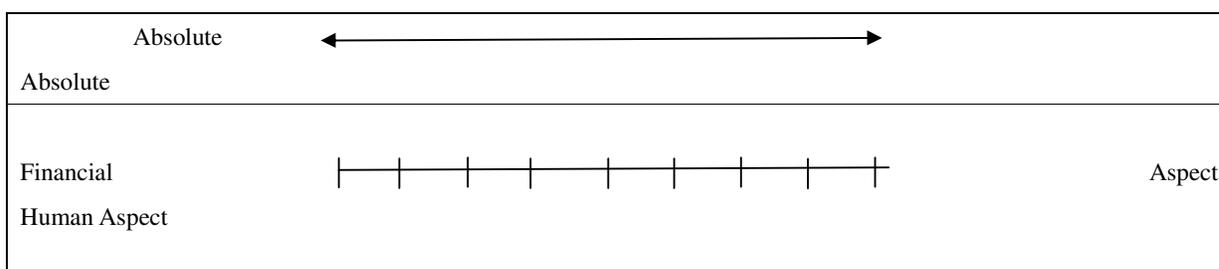
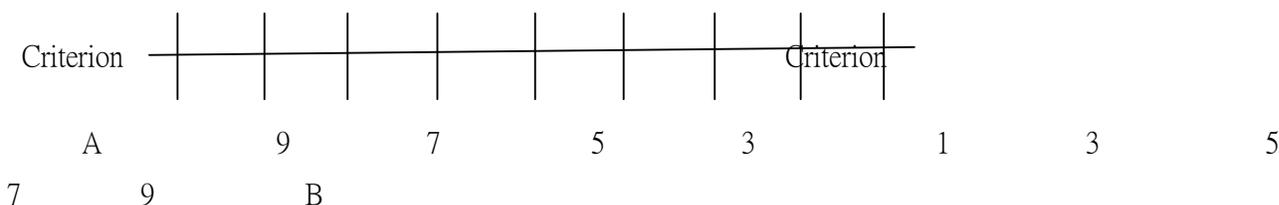
Assistant Professor

Name of the Bank.....

Which dimensions of performance in the list below have greater contribution to the overall performance of this bank? Compare each of the following pair of dimensions, and please encircle the response that most closely describes your response on the basis of following scales.

Extremely/ Absolutely	Very Strongly	Strongly Important	Slightly Important	Equally Important	Slightly Important	Strongly Important	Very Absolutely	Extremely Important
	Important	Important		Important		Important		Important

Important



	9	7	5	3	1
3	5	7	9		
Corporate Social Responsibility Customer Satisfaction (CSR)					
	9	7	5	3	1
3	5	7	9		
Corporate Social Responsibility Employee Satisfaction (CSR)					
	9	7	5	3	1
3	5	7	9		
Customer Satisfaction Employee Satisfaction					
	9	7	5	3	1
3	5	7	9		

Name (Optional).....

Designation.....

Experience (in years).....

Thank you for assisting us in our evaluation!

Ranking the motivational factors of Teachers in Urmia using SAW method (2011)

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Abstract:

Objective: The aim of this study is to rank the motivational factors of teachers that work as private sector employees in schools district 1 in Urmia.

Method: The study population included 30 people and the data was analyzed through SAW method. Reliability coefficient of 0.977 was estimated by using Cronbach's alpha and for this it was used SPSS software.

Results: highest credit rating among social interactions factors relate to credibility and reputation and lowest one was protection of social status. The highest and lowest scores among the organizational culture related to teachers' good activity and students' interest. Interest to working outside the home has the highest score among skill factors and mastery of the subject has the minimum score. The degree of competition among teachers with different fields of university education allocated higher score than teachers with same field of education.

Keywords: Motivation, Ranking motivational factors, SAW method, Teachers

Introduction:

Creating incentives for greater effort towards organizational objectives has always been a concern of managers. In this regard, various theories have been given as well as various incentive programs.

Management is trying to increase employee motivation by applying these theories and implementations of motivation programs.

Motivation is one of the factors that drive the performance of the organization.

Teachers as employees who are very influential in the country's future, as people are the key to the future of any country. Motivations of the teachers also have been in the attention of the training system and also parents of students. So the recognizing of these motivations is in public attention. Identifying the motivational factors would be useful in determining maximum capacity of teachers in school and whole country. Thus this study aimed to determine the motivation factors based on the situations and teachers' specific job properties and then ranking the factors using Simple-additive-weighting (SAW) method.

Research literature

According to researches several factors are affecting employee motivation. Akhundi Bunab et al. (2011) say that if managers have more internal control they will have more positive impact on their staff. It can be said that the more external control of the organization managers lead to the more reduction of its employees' motivation (Akhundi Bunab et al., 2011).

Ameri (2009) argued human relations climate in the organization and participation in decision-making have a positive relation with job motivation (Seyyed Ameri, 2009). Bakhtiari et al. (2009) in their study determined that an inverse correlation exists between emotional exhaustion and motivation. The increased compensation, improved working conditions, interrelationships, and security, thereby increase the efficiency of the result (Bakhtiari et al, 2009).

Shafizadeh (2002) examined 4 variables that include personal characteristics, job characteristics, workplace characteristics and features of the external environment among sport teachers. He also notes that a significant relation exist between motivation and education. But he mentioned that work experience does not affect the amount of Job motivation.(Shafeezadeh, 2002).

Farhangi et al. in 2006 stated employees believe that relationship between interpersonal and intrapersonal are effective in their work. But they will not alter the relationship between hero and the person's motivation. The relationship between interpersonal includes social dimensions of life and intrapersonal involve ecological dimensions of life. Motivational process is more external and staffs believe that work life is different from spiritual life (Farhangi et al., 2006).

Another study which was conducted in Tehran among education consultants shows that significant positive correlations exist between the organizational culture and job motivation. Also Women Trip Advisor had higher

levels of motivation and organizational culture and as a result, greater degree of flexibility, employee autonomy, creativity and initiative in working place increase the level of motivation (Gholami Hiedarabadi, 2011). Radafshar (2010) mentioned that factors such as weather conditions, use of credits, sports clubs and leisure centers, proper sanitation, and working in the private sector and having an adequate financial resources have a significant influence on motivation (Radafshar et al., 2011). Ostvar et al. survey in 2003 shows that the hierarchy of needs from the perspective of managers and employees have a good attunement. Also the motivation of employees and managers from the perspective of a difference is not observed. Managers and employees mentioned the respect and the dignity as the most important needs (Ostvar et al., 2003). But Kajbaf and colleagues demonstrated that significant differences exist in motivational factors in terms of employees and supervisors. Although the biological needs of the staff were mentioned, the need to respect the community was in priority. And it was the most important need against what is believed to be supervisors. This research shows that physiological needs are important in view of supervisors. While employees posed need for growing as the most critical needs (Kajbaf et al., 2005).

Another study shows that having a definite goal can develop the employees' motivation. Also training programs is a factor for determination.(Habibipour et al., 2009). Mahmoudi and Poukazem (2007) stated that the most and the least important factors among the internal factors of motivation as the job identity (52%) and responsibility (34%). Among the external factors of motivation, supervision and monitoring (51%) were the most important factor, and payroll (29%) was the least important one. Results of this research suggest that internal motivation factors are more important than extrinsic factors (Mahmoudi & Pourkazem, 2007). Ejejee et al shows that four styles of Motivation include empathy, conformity, objectivity, and the other-base were the key aspects of the stronger predictors of job performance (Ajhei et al., 2009).

In other research, the need for respect got the highest score among the motivation factors. The needs for physiologic needs of women were greater than men. (Keshtkaran et al., 2006). Pourhadi et al. (2009) show that a relation exists between aging and sex with motivation potential (Pourhadi et al, 2009). In another ranking of motivational factors among the Oil Company Products, the factors of non-financial extrinsic rewards, extrinsic rewards and financial rewards and in the end the internal (intrinsic) incentives have the greatest impact on increasing the motivation (Khademi et al., 2010). Rao (2006) in his research measures the production of urea

and nitrogen. Then he implemented group's motivation in the organization and ultimately measures productivity again (Rao, 2006). The results of his research show that production level increases by motivation increment. Employee welfare plans (including year-end bonuses, flexible time etc.) have a greater effect on their motivation and have less effect on productivity. Workers with different levels of education have different understanding of the effects of employee welfare. The findings indicate that employee benefit programs are more effective on younger employee (Hong et al., 1995).

One of the researches in 12 World Bank in Istanbul has been sent to staff on-line questionnaire via email that included all the managers and employees. The number of samples was 116 of 12 banks. According to the results, internal and external motivation influence on employee performance (Gungor, 2011). Another study stated the merit of managers is crucial to increase employee motivation. According to this study, only 23 of the 124 managers used motivational techniques. Managers purposefully assess their motivation skills. And employees believe that loyalty is based on their motivation (Lourdes et.al, 2011). Research on 124 directors in Bosnia-Herzegovina confirms these findings. This research suggests that fewer than one in five managers, often apply all the motivation techniques (Rahimic et al, 2012).

Motivation is high in the beginning. And it decreases with time. Therefore it is important to managers motivate the members in the final stages (Rahimic et al., 2012). Locus of individuals' control (those who believe they have control over their own destiny) has a significant relation with a sense of satisfaction and motivation. People with internal locus of control believe that they are the master of your own destiny. People with external locus of control are those that believe they have no impact on their future (W. H. NG. et al., 2006). Emotional stability is recommended to reduce negative emotions. In fact, a positive relation exists between the negative emotion and motivation to learn from mistakes (Zhao, 2011).

Aim and central research questions

The aim of this study is to rank motivational factors (social, organizational culture, individual factors, and training, competition and skill factors) of teachers. SAW method is used to achieve this goal.

Questions about social interactions include: relationships with parents, respect for students, maintaining social status, credit and approved by the director. The core questions will examine the organizational culture involve: classroom atmosphere, good and bad performance of teachers, and student's interests. Personal factors are

questions about the remuneration of material prize, educational interest, work ethic and preoccupations outside the classroom. Questions about participation in educational programs, group ranking and discovering training talents were asked to ranking the training factors. Questions of competition factor include the degree of competition among teachers. Questions such as working outdoors, master the skills and experience are questioned to analyze the skill factors. This study is practical and applied research and it identifies and ranks the teachers motivating factors in the District 1 in Urmia. The study population consisted of all teachers (teachers of private sector) in Girls High School that it was 30 persons in District1. For data collection a questionnaire containing 22 questions were used Range of options was divided based on the highest score of 9 to 1. Cronbach's alpha was used to test the reliability of the questionnaires that it was 97%.

Table 1. Reliability statistics

Cronbach's Alpha	N of Items
.977	22

Data analysis

After collecting the data, normalization of matrix was did. To doing dimensionless it was used Linear Dimensionless. This formula includes:

$$N_{ij} = r_{ij} / r_j^* \quad , \quad r_j^* = \max r_{ij}$$

In second level to obtain the rank of motivational factors, it was used formula of below:

$$E_q^* = \sum w_j \cdot r_{ij} \quad , \quad w_j = 1/9 = 0.111$$

Findings from this study suggest that among social interactions agents, the highest rating relates to the credibility and reputation (0.603). The lowest rate relates to the protection of social position (0.38). The rest scores were divided between these two scores. The following table shows the ranking of social interaction.

Table 2 - Ranking of social interaction

incompatibility Factor	The relative importance factors	Social interaction
	0.603	Reputation achievement

0.015	0.488	Relationship with Parents
	0.476	Respect of students
	0.435	Approved by the Director
	0.380	Protection of social position

Among the factors of organizational culture, teacher’s bad performance and good performance, classroom climate, and student interest factors have been evaluated. The table below shows the results of this analyze.

Table 3. Ranking of organizational culture

incompatibility Factor	The relative importance factors	organizational culture
0.01	0.746	Teacher’s good performance
	0.519	Teacher’s bad performance
	0.480	Class climate
	0.370	Students' interest

According to the results of the survey among demographic factors preoccupations gain highest score (0.729) and Conscientious was the lowest score (0.334).

Table 4. Ranking of factors affecting individual motivation

incompatibility Factor	The relative importance factors	Personal factors
0.017	0.729	Preoccupations
	0.556	Bonus
	0.375	Interest to field of

		education
	0.334	Conscientious

According to below table, it is concluded that incentives effective prioritization of education are:

- 1 - Group ranking 2 - Science Rank 3 – participation in training classes 4 – discovering the talents.

The following table shows the details of the results.

Table 5 - Ranking of factors influencing training factors

incompatibility Factor	The relative importance factors	training factors
0.232	0.650	Group ranking
	0.565	Science Rank
	0.533	Participation in training classes
	0.419	Discovering the talents

The results show that among skill factors the highest score is for work outside the home (0.829) and Mastery of the subject got the lowest score (0.581). The following table indicates the results.

Table 6. Ranking of skill factors

incompatibility Factor	The relative importance factors	Skill factors
0.009	0.829	work outside the home
	0.651	experience
	0.581	Mastery of the subject

The following tables show ranking of competition factors.

Table 7. Rating competitive factors affecting motivation

incompatibility Factor	The relative importance factors	Competition factors
0.00	0.748	Competition with other teachers in the field
	0.688	Teachers compete with the same majors

Conclusion

Individual characteristic of the employees' motivation is an important factor (Shafizadeh, 2002). It can be seen in the results that teachers' preoccupations and psychological factors is the most important factor. Thus it can be said reducing the psychological preoccupations can be effective in motivating employees. If the corporate cultures develop and participation in the Promotion, it will also improve job motivation (Gholami Hiedarabadi, 2011). In this study the most important aspect of organizational performance is well known as a good performance of the teacher. The study of Malmir (2009) about the social relations, the ability to communicate with others has identified as the most important factor to improving productivity (Malmir, 2009). In this study, obtaining reputation is accounted as the highest score in the field of social interaction. Ostvar research (2003) and Keshtkaran (2006) also confirmed the results of this study (Ostvar et al., 2003; Keshtkaran et al., 2006). The results show that the degree of competition between teachers of non same filed is more important than competition between teachers in the same field. Working outside the home is the most important motivational factors. Education is an important factor in motivating of staff (Habibi et al., 2009). Based on the present study team rankings has been identified the most important factors of training. According to this it is recommended greater investment on teachers' training.

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Java Database Connectivity Using SQLite: A Tutorial

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Biography

Dr. Richard A. Johnson was a systems analyst and engineer for several Fortune 500 companies before earning his doctorate in Computer Information Systems and Quantitative Analysis at the University of Arkansas (1998). For the past seventeen years he has been teaching Java programming and various other undergraduate and graduate CIS courses at Missouri State University in Springfield, MO. He has authored several computer programming texts as well as articles in *IEEE Transactions* and *Communications of the ACM*.

Abstract

Java is one of the most popular programming languages world-wide, controlling everything from web servers to automobile engines. Additionally, relational database processing is a mission-critical activity for all types of organizations: business, scientific, educational, and governmental. However, educators and students often struggle to connect programs and databases in a simple and efficient manner. This tutorial presents an extremely straightforward framework for connecting a Java program with an SQLite relational database using any one of these three popular tools: Windows Command Prompt, TextPad, and Eclipse. A basic knowledge of Java is assumed, but no prior knowledge of the aforementioned tools or SQL is required for this tutorial. Upon completion of this tutorial the student will understand how to use these tools to connect a simple Java program to an SQLite database. Then the student will be ready to apply SQL and graphical user interfaces toward the development of sophisticated Java database applications.

Keywords: database, Java, programming, SQL, SQLite, tutorial

Introduction

The purpose of this tutorial is to present a straightforward and relatively easy approach to connecting a Java program with a relational database within the context of a beginning-to-intermediate programming course. The Java language is chosen because it is one of the most popular programming languages in both the classroom and workplace (“Best Programming Languages.”, 2013; “TIOBE Software”, 2013). For example, a keyword search of “Java” in job titles on dice.com (“Dice.com”, 2013) returns about 4,800 positions while the same search for “c#” returns a second-best 1,200. Likewise, database programming is a vital skill owing to the overwhelming prevalence and criticality of databases in all facets of business, science, education, and government.

Upon surveying several popular Java programming texts (Liang, 2013; Savitch & Mock, 2013, Deitel & Deitel, 2012; Horstman, 2014; Gaddis, 2013; Farrell, 2012; Johnson, 2007), introductory Java courses usually include these topics: data types, variables, conditions, loops, methods, arrays, and basic object-orientation. More advanced courses delve much deeper into object-orientation by including inheritance, polymorphism, exception handling, string processing, file input/output, and graphical user interfaces (GUI’s). Some ambitious Java courses may include data structures, collections, recursion, generics, multithreading, graphics, and (possibly) database programming.

It is evident that this is a lengthy list of potential topics for a one- or two-semester sequence in Java programming. Some topics are often eliminated due to lack of time, and regrettably database programming is sometimes one of them—some leading texts don’t even present this topic, or it is relegated to an appendix or a companion web site. This is unfortunate for at least three reasons: (1) database programming is vital given the criticality of database processing in organizations; (2) database programming has a strong connection with the topic of GUI’s, which is nearly always taught in Java courses; and (3) students receive a great deal of satisfaction and motivation by getting GUI’s and databases to work together in Java applications, thus encouraging further study in the field.

One reason that instructors often bypass Java database programming is the difficulty that students may encounter when installing or configuring database software for use with Java programming tools. There are primarily two relational database engines discussed in most Java texts: (1) Java DB (“Java DB”, n.d.), Oracle’s relational database software, also known as Apache Derby (“Apache Derby”, 2013), which is included with the Java JDK installation; and (2) MySQL (“MySQL”, 2013), a popular open-source relational database management system. However, both of these approaches can be extremely challenging for the average student because of many technical installation, configuration, and implementation issues. A much easier approach for Java database programming is presented here using the SQLite database engine (“SQLite.”, n.d.).

This tutorial is a brief introduction to Java database programming, only covering how to connect a Java program to an SQLite database. The specific steps provided here are for a Windows PC, although they should provide a basis for other platforms. Future study of Java database programming would consist of (1) learning to execute a wide variety of SQL commands using SQLite and (2) learning to create a fully functional GUI-based Java database application that interacts with an SQLite database. This introductory tutorial on Java database connectivity is outlined as follows:

- A. Installing the Java JDK
- B. Installing the Java programming tools TextPad and Eclipse
- C. Testing the installation of JDK and tools with a simple Hello.java program
- D. Installing and configuring the SQLite relational database engine and JDBC drivers
- E. Testing the installation and configuration of SQLite with a simple Java database program

Installing the Java JDK

You may already have the Java JDK installed on your computer. If not, or if you need to upgrade to the most recent version, follow these steps (“Java SE Downloads”, n.d.):

1. Go to <http://www.oracle.com/technetwork/java/javase/downloads/index.html>.
2. Click the Java Platform (JDK) download graphic.
3. Click the ‘Accept License Agreement’ button.
4. Click the Java SE Development Kit link appropriate for your platform (Linux, Mac, Solaris, or Windows) and version (32-bit or 64-bit) and follow the prompts. To determine the version of your Windows operating system, right-click the Computer icon and select Properties.

The Java JDK allows programmers to create Java applications which can then be run using the JRE (Java Runtime Environment) included with the JDK installation. After installation on a Windows computer, the contents of the folder **C:\Program Files\Java\jdk1.7.0_45** (JDK 7 Update 45 at the time of this writing) are shown in Figure 1.

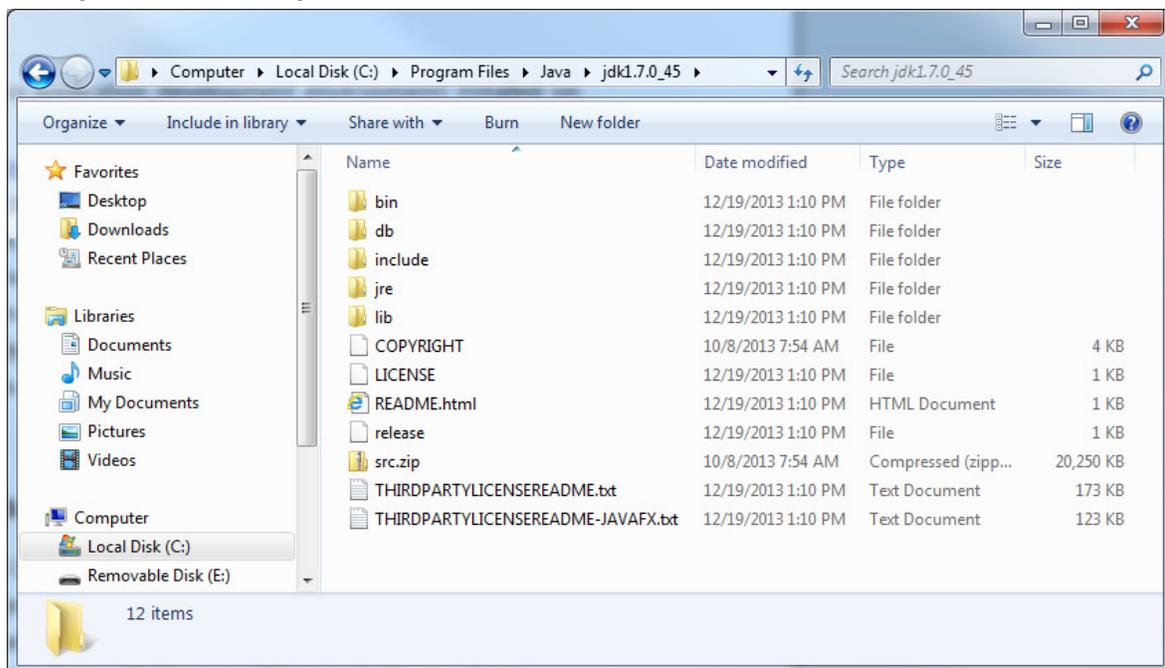


Fig 1 Java JDK installed on a 64-bit Windows computer

Note the folder **bin** in Figure 1, which contains executable files for compiling and running Java programs (javac.exe and java.exe, respectively). The folder **jre** contains files to support the Java Runtime Environment for running Java applications. These folders are noted because they are important for other

installation and configuration procedures to follow.

Installing the TextPad Java Editor and Eclipse Java IDE

You may already be using tools such as the Java editor TextPad (“TextPad”, 2013) or the Java integrated development environment (IDE) Eclipse (“Eclipse”, 2013). There are many other popular Java IDE’s available, such as NetBeans (“NetBeans IDE”, 2013), which can also be used in the context of this tutorial. In case you are not currently using such tools, this section explains how to install both TextPad and Eclipse, as follows:

1. To install TextPad, visit textpad.com, click the Download tab, and download the 32-bit or 64-bit version as appropriate (Windows only). Follow the prompts to complete the installation.
2. To download Eclipse, visit eclipse.org, click the Download Eclipse link, select an operating system (Windows, Linux, or Mac), and click the appropriate download link (such as Windows 32-bit or Windows 64-bit). Follow the prompts to complete the installation.

Testing Installations with a Simple Java Program

In order to test the installations of the previous sections, you can write a simple Hello.java program and run it using (1) Notepad and Command Prompt, (2) TextPad, or (3) Eclipse. These are the three tools that will be used later to test a simple Java database application. Use the Java code in Figure 2 to create the program Hello.java and test the installations according to the following procedures:

```
public class Hello{
    public static void main( String [] args ){
        System.out.println( "Hello, world!" );
    }
}
```

Fig 2 A simple Hello.java program.

Create, compile, and run Hello.java using Notepad and Command Prompt

1. Enter the code in Figure 2 into Notepad and save the file as Hello.java on flash drive E: (your flash drive letter may be different).
2. Run Command Prompt, enter **e:** at the prompt to move to drive E: and enter **javac Hello.java** at the prompt to compile the program.
3. If no errors occur, enter **java Hello** at the prompt to run Hello.class (which is the compiled version of Hello.java). The output, “Hello, world!” should be displayed, as shown in Figure 3.



```
Administrator: Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\raj127>e:
E:\>javac Hello.java
E:\>java Hello
Hello, world!
E:\>_
```

Fig 3 Compiling and running Hello.java using Command Prompt

If these steps do not function properly on your computer you should first check that your Hello.java program has been typed correctly. If so, you may need to edit the CLASSPATH variable in the Windows operating system so that your computer can find the files javac.exe and java.exe (located in the **bin** directory of the Java JDK installation). Navigate using File Explorer to the **bin** folder (for example, **C:\Program Files\Java\jdk1.7.0_45\bin**), click the address box in File Explorer and copy this path, run Control Panel, click System and Security, click System, click Advanced system settings, click Environment Variables, click CLASSPATH under System variables, click Edit..., press the End key to move to the end of the CLASSPATH string (do NOT delete the current CLASSPATH string), type a semi-colon at the end of the CLASSPATH string, paste the path (for example, **C:\Program Files\Java\jdk1.7.0_45\bin**) to the JDK **bin** folder, and click OK, OK, OK.

Create, compile, and run Hello.java using TextPad

1. Launch TextPad, enter the code exactly as shown in Figure 2 within the TextPad editor, and save the file as Hello.java on drive E: (or any location will do).
2. Press Ctrl-1 to compile the program, then Ctrl-2 to run the program (see Figure 4). If everything runs smoothly, the output “Hello, world!” will appear in a separate Command Prompt window.

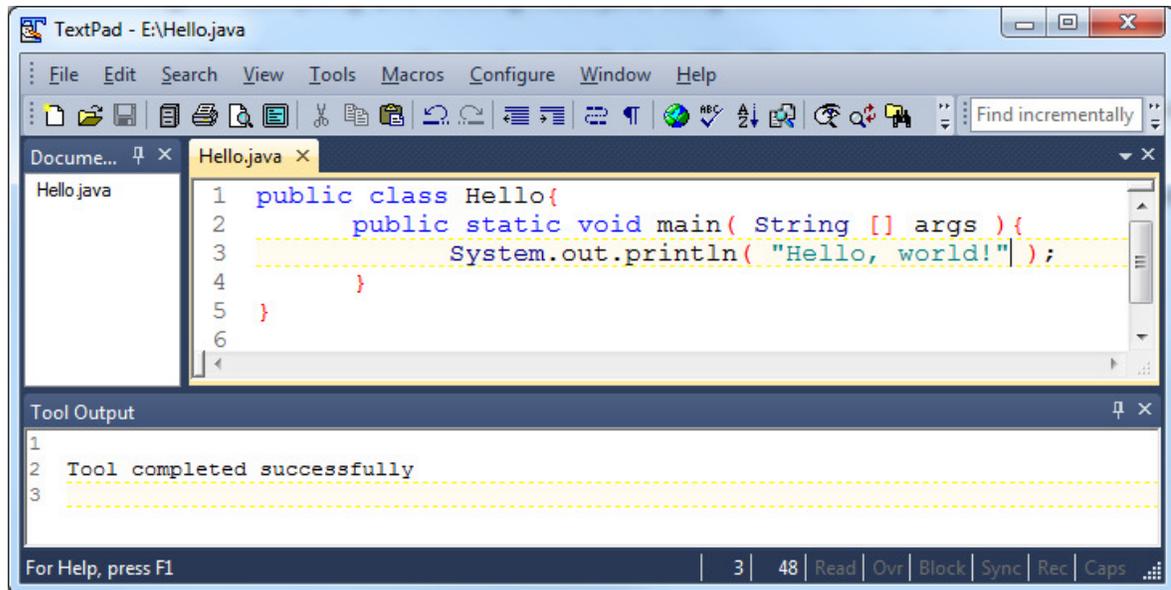


Fig 4 Hello.java created and compiled in TextPad

If the Tool Output window in TextPad displays errors, check the Hello.java program for typographical errors, save, re-compile, and re-run. If the commands Ctrl-1 and Ctrl-2 do not function properly in TextPad, you may need to perform the following steps from the TextPad menu to add the Compile and Run tools: Click Configure, Preferences..., Tools, Add, Java SDK Commands, OK. If these tools are still not available, perform the modification of the CLASSPATH variable as discussed in the previous section.

Create, compile, and run Hello.java using Eclipse.

1. Create a folder called 'workspace' (or some other folder name of your choice, but workspace is the most commonly used) on flash drive E: (or any location).
2. Launch Eclipse.
3. To select the workspace folder (the folder where Eclipse projects are stored), click Browse in the Workspace Launcher dialog, select the folder 'workspace' previously created on drive E:, click OK, OK. *NOTE: An Eclipse workspace is a folder where your Java project folders are stored.*
4. Close the Welcome screen.
5. Click File, New, Java project. Enter a project name (such as "Test"), click Finish. *NOTE: An Eclipse project is a folder where your Java program and various supporting Eclipse files are stored.*
6. Click File, New, Class. Enter 'Hello' as the name of the class, click Finish.
7. Enter the code exactly as shown in Figure 2 within the Eclipse editor and save the file.
8. Click the Run button in the toolbar (see Figure 5).

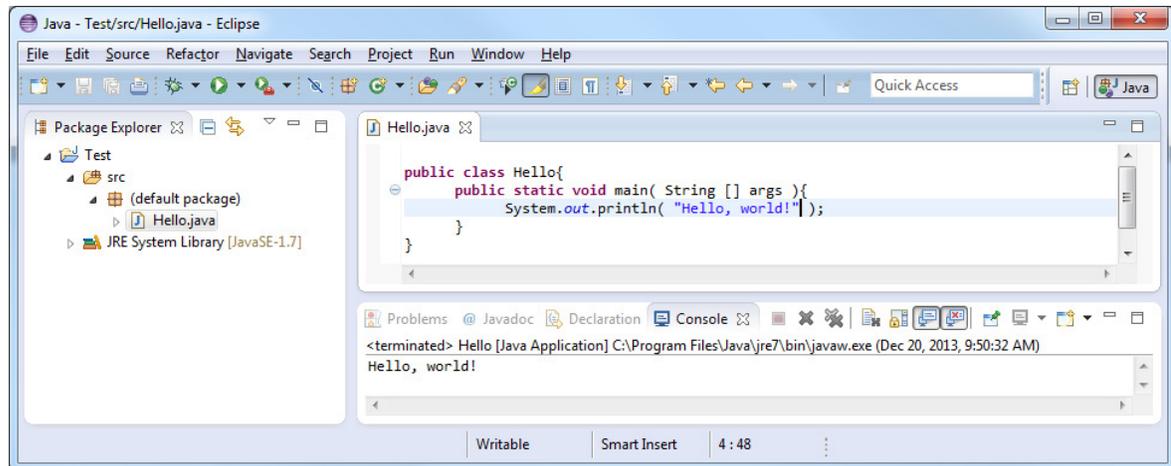


Fig 5 Project Test containing Hello.java created, compiled, and run in Eclipse

As you can see, creating and running a Java application using Notepad/Command Prompt, TextPad, and Eclipse become increasingly complex and sophisticated. However, a Java editor (such as TextPad) provides many features not available in Notepad/Command Prompt, and a Java IDE (such as Eclipse) provides many additional features that aid in professional application development.

Installing and Configuring the SQLite Database Engine and JDBC Drivers

In order for a Java program to communicate with relational database software, such as SQLite, special JDBC (Java database connectivity) drivers are needed. A JAR (Java archive) file that is used for this purpose is **sqlite-jdbc-3.7.2.jar**, which is available for download on the Internet. This JAR file contains the SQLite database engine as well as a Java class that enables a Java program to interact with SQLite. Follow these steps to download the JAR file:

1. To download **sqlite-jdbc-3.7.2.jar** visit <https://bitbucket.org/xerial/sqlite-jdbc/downloads> (“Bitbucket.”, n.d.)
2. Right-click the link for **sqlite-jdbc.3.7.2.jar**, select Save target as..., and save this JAR file in the root directory of your flash drive E: (your drive letter may be different). This will enable a Java database application file in this directory (E:\) to interact with the SQLite database engine and SQLite JDBC drivers. *Note: If you have followed all the steps in this tutorial, your E: drive should now look like Figure 6.*
3. In order for the JDBC driver for SQLite to work with TextPad, copy the **sqlite-jdbc-3.7.2.jar** file to this directory in your Java JDK installation on a Windows computer: **C:\Program Files\Java\jdk1.7.0_45\jre\lib\ext** (your JDK version may be different).
4. In order for the JDBC driver for SQLite to work with Eclipse, copy the **sqlite-jdbc-3.7.2.jar** file to this directory in your Java JDK installation on a Windows computer: **C:\Program Files\Java\jre7\lib\ext** (your JRE version may be different).

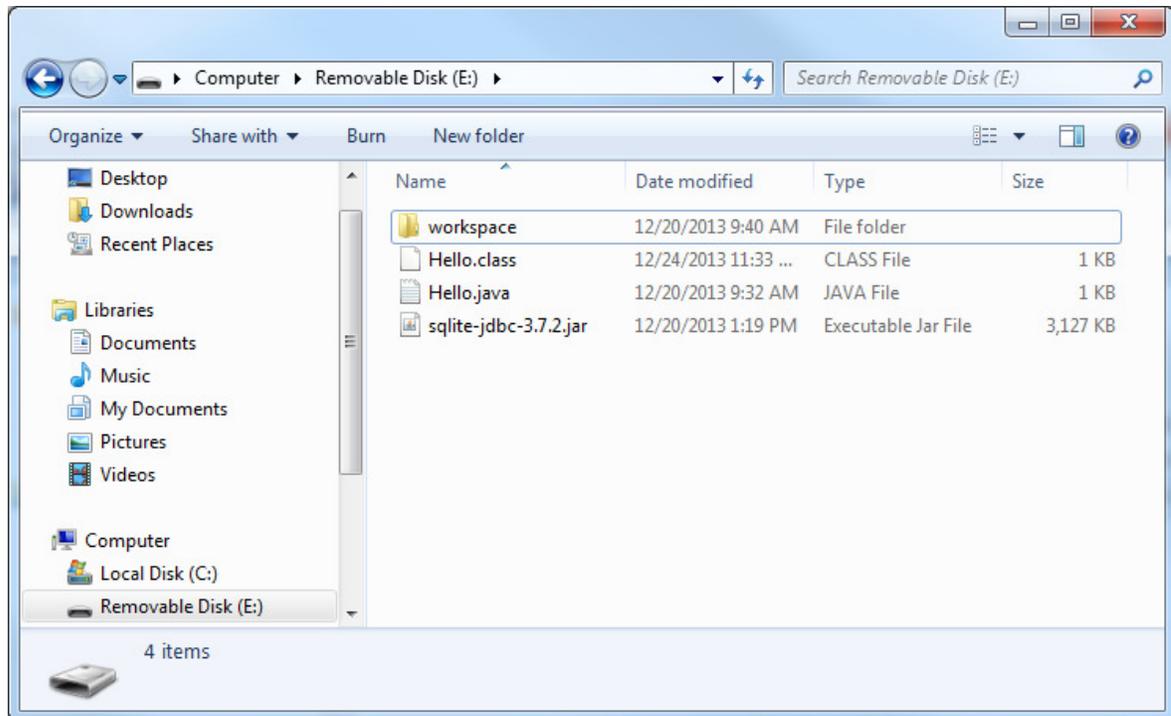


Fig 6 The JAR file `sqlite-jdbc-3.7.2.jar` copied to flash drive E:

Running a Java Database Application with SQLite

At this point in the tutorial you have installed (1) the Java JDK, (2) TextPad, (3) Eclipse, and (4) the SQLite JDBC driver `sqlite-jdbc-3.7.2.jar`. In this final section, you will create and run a very simple Java program to test the connection between it and an SQLite database file.

A Sample Java Database Program

Figure 7 presents an extremely simple Java database program that does nothing more than create an SQLite database file and establish a connection to it. Of course, a complete Java database application would involve creating all components of a three-tier design: presentation tier (the GUI that determines how the application looks), middle tier (the business logic that determines what the application does), and data tier (the database that determines what the application stores). ("Using a Three-Tier Architecture Model.", 2013). Creating a complete Java application that easily connects to an SQLite database could be covered in additional tutorials or Java texts, but the basic connectivity approach would be the same as presented here.

```

1 import java.sql.Connection;
2 import java.sql.DriverManager;
3 import java.sql.SQLException;
4
5 public class SQLiteJDBC {
6     public static void main( String [] args ) throws SQLException,
7                               ClassNotFoundException {
8         Class.forName( "org.sqlite.JDBC" );
9         String dbFileName = "test.db";
10        Connection conn = DriverManager.getConnection(
11            "jdbc:sqlite:" + dbFileName );
12        System.out.println( "Opened database successfully" );
13 }

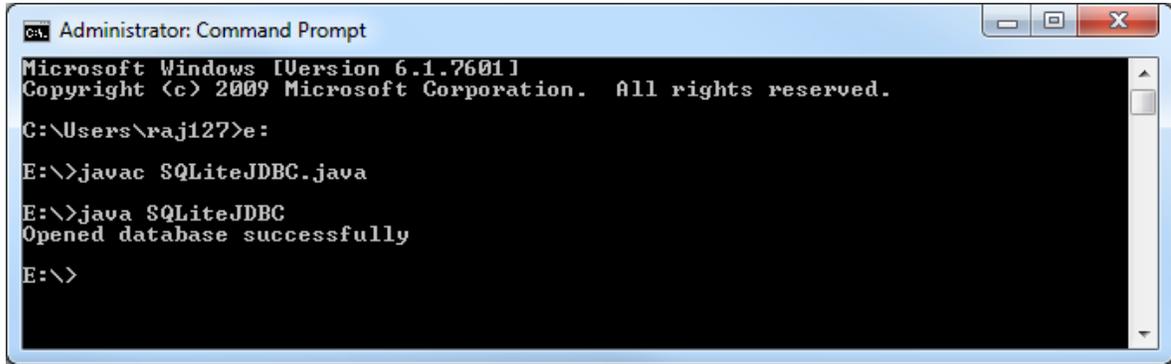
```

Fig 7 Class `SQLiteJDBC` to test database connection

The code in Figure 7 may appear complex to the beginning Java student, but taken in segments it's relatively easy to understand, especially to the experienced Java programmer. Lines 1-3 import three Java classes that are used in the program. Notice that they are all from the `java.sql` package, meaning that they are classes designed to work with relational databases. Line 5 is the `class` declaration and Line 6 is the `main` method declaration. Because database programs may encounter situations where database files could be missing or incorrectly structured, the Java language requires that exception objects from classes `SQLException` and `ClassNotFoundException` be thrown (in the `main` method declaration, Lines 6-7) or caught within the program using `try` and `catch` blocks (`try/catch` is covered within the topic of Java exception handling in most Java courses). Line 8 loads the driver class `org.sqlite.JDBC` (located in the file `sqlite-jdbc-3.7.2.jar`), thus enabling the Java program to interact with SQLite. Line 9 simply establishes the name of the SQLite database file that will be created when this program runs. Lines 10-11 create a `Connection` object allowing for interaction between this Java program and the database file. Line 12 (if reached without error) confirms that the program works. The following steps can be performed to test the code in Figure 7 using Command Prompt, TextPad, and Eclipse.

Testing the Sample Java Database Program

1. To test the code in Figure 7 using Command Prompt, enter the code into Notepad and save the file as **SQLiteJDBC.java** on drive E: (your drive letter may be different). Then run Command Prompt, move to drive E:, enter **javac SQLiteJDBC.java** to compile, then enter **java SQLiteJDBC** to run. The message in Line 12 should appear, as shown in Figure 8.



```

Administrator: Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\raj127>E:
E:\>javac SQLiteJDBC.java
E:\>java SQLiteJDBC
Opened database successfully
E:\>
  
```

Fig 8 Testing a Java database program using Command Prompt

2. To test the Java program in Figure 7 using TextPad, launch TextPad, enter the code in Figure 7 within the TextPad editor, save the file as **SQLiteJDBC.java** (at any location), press Ctrl-1 to compile and press Ctrl-2 to run. The confirmation message in Line 12 should appear in Command Prompt.
3. To test the Java program in Figure 7 using Eclipse, launch Eclipse, select the workspace folder on E: (or elsewhere, if desired), create a new Java project (called **Test DB**, for example), create a new class called **SQLiteJDBC**, enter the code in Figure 7 in the Eclipse editor, save the file, then click the Run icon in the Eclipse toolbar. The confirmation message in Line 12 should appear in the Console window of Eclipse.

If errors appear while trying to compile or run the Java program in Figure 7, first check the typing in **SQLiteJDBC.java**. If errors persist, retrace the steps throughout this tutorial to ensure that programs such as **Hello.java** are indeed working in Command Prompt, TextPad, and Eclipse, and that the driver file **sqlite-jdbc-3.7.2.jar** is installed and stored as described earlier. If no errors occur, you are ready to learn the SQL language and then to create Java GUI's that interact with an SQLite database file.

Conclusion

This tutorial first presented steps to install the Java JDK, the TextPad Java editor, and the Eclipse Java IDE. After creating and testing a simple **Hello.java** program using Command Prompt, TextPad, and Eclipse, the procedure for downloading and storing the SQLite driver file **sqlite-jdbc-3.7.2.jar** was provided. Finally, a simple **SQLiteJDBC.java** database program was demonstrated to verify that a Java program can indeed interact with an SQLite database. These procedures are much simpler and faster than presented in most Java textbooks using other database engines, such as Java DB and MySQL.

Additional tutorials (or individual research by the student) could provide information on how to execute a wide variety of SQL commands on an SQLite relational database. One such source of information can be found in the SQLite section of tutorialspoint.com ("Tutorials Point", 2013). Additionally, tutorials or Java texts could enable the student to develop a fully functional Java database application that can create, retrieve, update, and delete records within a database table, or provide other useful database operations, all within the context of a graphical user interface.

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TOURISM BRAND - THE PREMISE OF A POSITIVE IMAGE FOR A TOURIST DESTINATION. STUDY CASE: ROMANIA

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Abstract

As to any destination, the main goal of tourism is economic growth and sustainable competitive development, setting itself a creative identity that accurately reflects promised experience and the ability of destination delivery.

Creating a destination brand seems an apparently easy project that appears as a mere name, as an important symbol of a destination, in fact, being a reflection and a vital source to identify a destination's character and strategy. The competitiveness of brand identity is essential for the competitiveness of global destination on the tourism map at world level.

This paper aims at highlighting the theoretical aspects regarding destination brand; the research methodology used in creating Romania's tourism brand, determining the key elements when ranking it, identifying the key elements of differentiation and achievement of visual identity and of brand slogan.

Keywords: tourist brand, tourist destination, promotion, tourist view and identity.

1. Introduction

A destination brand is defined as a "name, symbol, logo, word or other graphic elements that identify and differentiate a destination, conveying the promise of an unforgettable travel experience, uniquely associated with a destination, enhancing the experience of pleasant memories" (Kerr 2006, 277).

A destination brand is significant in this period when there is a need for a particular destination (a country, region, city) ranked by buyers and interested parties (Baker and Cameron 2008, 88). The authors identify an issue in terms of destination branding referring to the fact that products having the same destination may be perceived differently depending on target groups (Hankinson, 2005, 12).

A tourist product is more complex than most products, being rather an experience than a tangible good (Gartner 1986, 643). According to Baker and Cameron, an effect of globalization is the fact that penetrating a market (in a country, region, city) becomes a very important strategic process due to increased competition among multiple destinations seeking to attract investors and visitors (Baker , M.J. and E. Cameron, 2008).

There are certain issues that must be considered when it comes to branding a region. The name "Balkans" has been changed into "South East Europe" because it the West has thought it a negative word due to the social instability in the region (Sala 2001, 328). Each country has a tendency to build its own country brand, that is why other countries are regarded as its competitors.

According to a survey (Konecnik and Go 2008, 184), the greatest competitors of Slovenia are Austria, Croatia, the Czech Republic and Hungary. Each of these countries offers similar tourist products and is trying to attract tourists from the same tourist markets. Viti'c and Ringer (2007, 127) examine the challenges and opportunities for promoting Montenegro in terms of its sustainable destination tourism, during the post-civil war period in former Yugoslavia, and grant it the unique country branding status. The terms of imagery and branding are very important, especially to countries with negative consequences after the war. For example, until recently, Bosnia and Herzegovina have been associated with war, and to change such a view first of all they have to get themselves far from their negative past (Duboroja and Mlivic 2008, 3). Croatia has a similar problem, since it is perceived more as a post-socialist, post-Yugoslavian and post-war country (Martinovic 2002, 315).

For example, Gilmore explains the success brand of Spain as having been built according to the ranking strategy of Porter's diamond. It considers the basic skills for the better ranking of a brand, including a region's physical and human assets mostly focused on friendly people (Gilmore 2001, 287). A similar example of branding, people and places is shown in a survey by Foley and Fahy (2004, 209) where the message used to enhance this ranking is "Ireland, an emotional experience." This shows that, in essence, the image of a friendly host, of people and beautiful, unspoiled landscape are the "core values" to the Irish tourism.

Other surveys highlight the need for a destination brand: creating an image and a strategic vision as part of a recognition flow - awareness, differentiation, brand consistency and brand message regarding strategic communication as well as creating the confidence of a target group (Carmen, Stuart and Brent 2005, 335-36). The ranking strategy and the development of brand destination may be explained by the terms of brand image and brand identity.

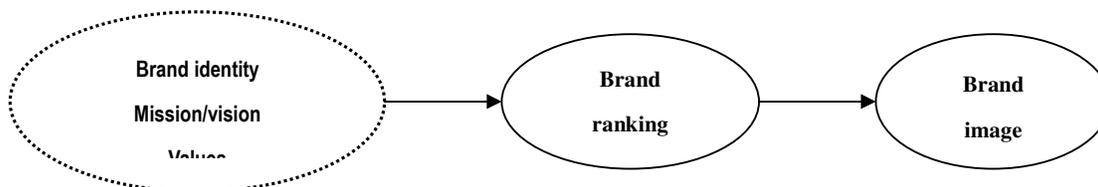


Figure no.1. Brand identity, brand ranking and brand image

(adapted from Baker and Cameron 2008)

In Risetano's opinion (2009, 7), a destination brand identity is based on six elements: culture, character, personality, name, logo (and symbols) and slogan of a brand.

However, previous surveys have suggested a model that conceptualizes brand identity in terms of vision and culture, which leads to the desired ranking, personality and future relationships (Chernatony

1999, 166). Brand image is based on the connections that tourists make about a destination and its brand (Risitano 2009), all the information about a place and the impressions about the people who belong to that place. (Kotler and Gertner 2002, 249).

2. Research Methodology

The purpose of this research work is to identify the elements necessary to build a brand, its ranking by setting a target group, its reference background, its differentiation elements and data to support these components.

For collecting information both qualitative and quantitative research are used (Steckler A, McLeroy KR, Goodman RM, Bird ST, McCormick L, 1992, p.1-8).

Qualitative research allows the identification of consumers' attitudes, perceptions and motivations (FJ Fowler, 2009), providing explanations of their behaviors and decisions, the results not being directly measurable and statistically speaking they cannot be extrapolated to basic population unless with great care. It is stand-alone exploratory research or usually used to precede a quantitative survey bringing additional information (Patton, MQ, 1980). Among the techniques used to achieve qualitative studies, one can use: open, semi-direct or direct individual dialogue; group meetings – group focus, projective tests - exposing subjects to stimuli that make them project their needs, motivations, preferences, intentions etc.; association tests - combination of words, completing a sentence, a story, a drawing etc. (Groves, RM, Fowler, FJ, coupe, MP, Lepkowski, JM, Singer, E., 2009, Fowler FJ, 2009, Ting-Toomey, S., 1984, pp. 169-184, Van Maanen, J., 1983).

Quantitative research allows quantitative (statistical) results using a number of specific techniques: a questionnaire survey, an omnibus investigation, panels etc. (Smith MJ, 1988, Morgan, G. and Smircich, L., 1980, 491-500).

Quantitative research uses questionnaires, the basic tool used in marketing research for gathering information, either a written or an electronic document that includes a set of *open and/or closed questions* (with single or multiple choices, rankings, scales etc.) to which respondents answer according to their own opinions (Schaeffer, NC, Stanley P.2003, p 65-88, Fowler Jr., Floyd J., Cosenza C, 2008, pp. 136-60). Obtaining relevant results requires much experience and care when preparing a questionnaire along with clear and coherent wording, these tasks being the most difficult during achieving a survey.

Qualitative research has used two research tools:

- *Depth interviews*. 91 interviews have been conducted of an average duration of 37 minutes, with experts from the tourism industry, tourist tour operators, writers in the field, other opinion leaders in Romania, diasporas or foreign specialists working in or with Romanian tourism (the source markets investigated have been: Austria, Germany, Hungary, France, Italy, the UK, Ireland, Russia and the U.S.), aiming at integrating a variety of lessons, experiences, knowledge, interests and understanding Romania's context and its tourist potential.

- *Focus groups*. Two focus groups have been organized with the Romanian key players in the tourism field in order to check the first hypotheses about brand ranking and competitive advantages.

Quantitative research has been conducted by:

- *Computer-assisted telephone interviews.* 10.800 interviews have been conducted, that is 1.200 for each market. The interviewed tourists in Romania are people who have gone on vacation trips in the past three years. The tourists on the source markets are represented by people who have travelled to Romania to spend their holidays in the last 3 years.

Romania's image and tourist potential analysis has been supplemented by the collection of information through:

- *field trips* to major (potential) tourist destinations in Romania;
- *desk research* on information materials written about Romanian, its markets and its main competitors, by the Internet and relevant documents such as Romania's 2007-2026 Tourism Master Plan.

The sample size on each market provides 95% confidence with an error margin of $\pm 3\%$.

A limitation of the research is that in order to be meaningful, such research should be carried out continuously / periodically as the trends in tourists' expectations and requirements are becoming increasingly higher and complex due to changes and trends in the environment and increasing competition among tourist destinations.

The research has envisaged finding the views and knowledge about Romania, identifying travel experiences, information sources, travel motivations, types of holidays, interests, needs, favorite destinations and socio-demographic and psychographic characteristics.

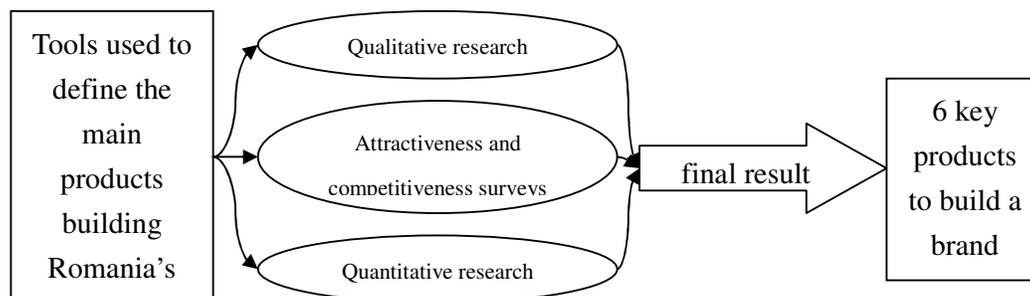


Figure no. 2. Tools used in defining the main products of Romania

Major Research Findings

1. The knowledge about Romania and elements of differentiation are rather scanty;
2. Romania's personality fits that of a good tourist destination;
3. The potential on source markets is good;
4. The main potential group of Romania is different from that of an average traveller;
5. The 6 products selected offer a high potential for growth and development;
6. The consistency between the requirements of the main potential group and Romania's tourism offer is excellent;
7. Nature is the main element that should be highlighted on the foreign market.

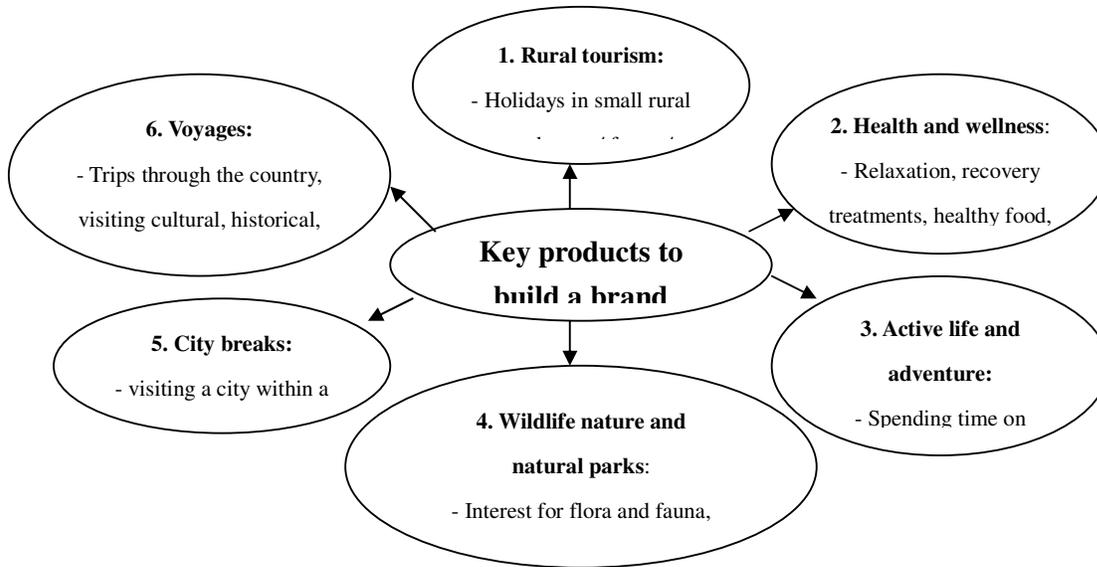


Figure no. 3. Key elements to build a brand

A product portfolio has to be introduced through the conceptual model of a destination product, describing the link between environment, infrastructure, quality, value and intention to return (Murphy, Pritchard and Smith 2000, 47-49).

3. Brand Ranking

Each tourist destination in the world has a "brand image". If carefully developed, a brand serves to differentiate the former from its competing destinations. However, some destinations do not have a well-defined brand strategy supported by substantial advertising campaigns and thus they have a confusing image to potential customers. In this context, an image must always be controlled by a clear projection of brand identity, because when consumers decide on a destination for holidays or a business conference, several "brands" compete for their attention. A powerful brand has several competitive advantages and has an attractive appeal to consumers. In tourism, factors such as the cost of travel, comfort, quality and facilities are important when choosing a destination, but the most powerful motivator is a "brand". It can add a destination on a consumer's "shopping list" and creates an emotional trigger, which increases the chances for that destination to be chosen before others.

The official advertising and promotion of a country as a tourist destination should be based on a well-defined brand strategy. If a destination brand is *false, incorrect, inaccurate*, they will find it difficult to compete with the brands created by competing countries.

Developing a strong brand for any destination requires a coherent, effective, ranking strategy based on a thorough understanding of consumers' needs which encourages them to believe they have made the best choice from among all the existing destinations.

Ranking assumes identifying brand elements that provide satisfaction and a high level of recognition as a tourist in a new destination, a slogan linking brand identity and its real image (Pike 2005, 258) which lead to a winning a better position of the destination on the market. A destination brand firstly involves connecting a place with a clear imagine, producing a positive mental view that values everything

defining the place. If the images come in bulk, the result can only be confusion or forgetfulness and so a failure of communication to a target group. To make a brand well-known, one must act on the principles of integrated communication mix (Papadopoulos and Heslop 2002, 310) that is to involve both the government and professional associations (through mass-media advertising) as well as travel agencies, associations and individual firms (personal selling and incentives). Since tourism involves services and experiences that cannot be evaluated before purchasing them, personal and social communication is a trustworthy source of information about a potential destination (Sonmez and Sirakaya 2002, 195).

The elements discussed above lead to the conclusion that it is necessary to determine the existing brand image of Romania, as well as the first brand associations that rely on it in order to improve brand identity and its ranking strategy to target groups.

In order to rank a brand, the model used includes four elements: the target group, the reference background, differentiating elements and reasons to believe. In a nutshell, the ranking of Romania brand is:

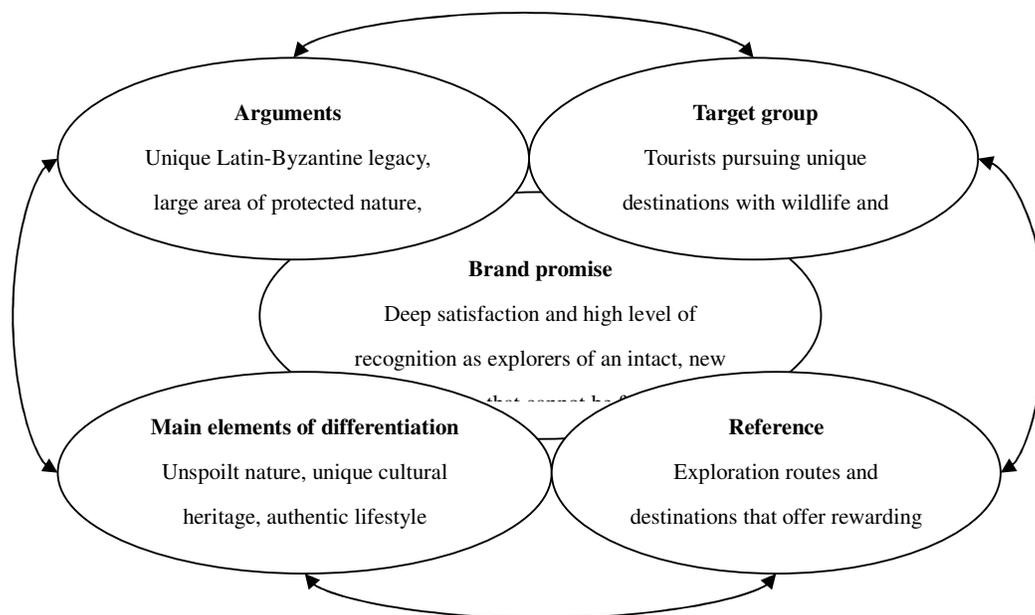


Figure no. 4. The brand ranking model

The importance a destination brand has acquired in time was anticipated by Morgan and Pritchard (2001, p 214) a decade ago who stated that "the fight to gain customers in tomorrow's tourism industry will not refer to price, but to the minds and hearts of customers –a brand (...) will essentially be the key to success".

Brand identity and brand image are necessary ingredients for a successful brand destination (Qu et al., 2010, p 2). Whereas identity is created by a transmitter and supported by all or some (natural and / or artificial) tourist attractions, history, people, in other words elements that can constitute reasons for choices, an image is perceived by a receiver and supported by previous experiences and communication strategies of a transmitter (according to Kapferer, 1997, p 32). Between these two concepts, in many cases there are differences because when choosing a tourist destination, tourists can take account of peculiarities such as nature monuments, climate, infrastructure, arts monuments and so on, and / or

intangible characteristics such as feelings of freedom, security, relaxation, energy amount, etc.. Therefore, determining a target group is essential to developing a brand, as some aspects of a destination can be positive to a segment of tourists and negative to another (Fan, 2006, p 11).

A target group is represented by a discerning traveller, a well-defined global concept for the professionals in the tourism sector. The key idea that all discerning travellers share is looking for unique experiences and places that are less explored or discovered by the masses. Discerning travellers are opinion leaders and trend setters. Attracting them is likely to generate a "tracking" trend from other segments.

In a study (Strizhakova, Coulter, and Price 2008, 62) the opinion of a younger population considering global brands was determined, and it was pointed out that in developing countries, research indicates that young consumers, who seek to better their economic position and that of their country are likely to embrace brands as a discourse of power and to believe that buying global brands enables them to participate in that global arena by empowering their own local companies and nations. According to Morgan, Pritchard and Piggott, young people look for new experiences and traveling to new destinations. Such consumers are often very web wise, complementing other advertising and public relations media activity (Morgan, Pritchard and Piggott 2003, 294). Today's tourists are not asking 'What can we do on holiday?' but 'Who can we be on holiday with?,' they are increasingly looking less for escape and more for discovery, and that creates a basis for emotional connection (Morgan, Pritchard and Piggott 2002, 338).

A target group includes people aged between 25 and 35 years old who prefer to enjoy independent travels. These visitors often seek adventure, they are always ready to push their limits and start exploratory trips. Another type of traveller focus can be placed upon are the so-called "empty nesters" who enjoy good health, have time to travel alone, without children, and often have a high financial potential.

Discerning travellers mainly come from metropolitan areas; they long for landscapes and natural, healthy lifestyles. In addition, their interests in cultural and historic life are above average and that is why Romania is a great place to meet the expectations of such a target group. Since they form opinions and trends, they will be the first to come to know our country and by their direct and online recommendations, they will open the way for more and more visitors.

Reference background is represented by Romania which is a country for those who have a strong desire to "*explore destinations outside ordinary paths*" with authentic wildlife and culture, and to live rewarding experiences.

In short, a reference background summarizes those travel expectations (Seddighi HR and Theocharous AL (2002), 475-487) of a target group that Romania can offer. What benefits will they get by visiting Romania? The answer to this question will allow one to find destinations that offer similar benefits and therefore competitors it must differentiate from.

Visitors can receive unique tourist experiences through journeys that involve exploring nature, Romanian culture and trips in places that are inspirational. Being travellers who explore and usually travel without children, such a target group prefers among others voyages about the country, holidays in the mountains, parks or natural reservations, rural areas and active holidays.

Romania is a great destination for them, offering the opportunity to explore new destinations, authentic local life and culture and to live personal experiences that provide deep satisfactions. Romania is a place where a journey itself is the reward, not a check on a travelling list. The type of experiences offered by Romania allows visitors to establish contacts with its inhabitants and enjoy unscheduled meetings, even if all communication sometimes confines to smiles and gestures. Romania gives visitors the opportunity to make themselves part of their travel experiences.

Differentiation elements are those factors which render the country unique (Buckley PJ, Papadopoulos SI, 1986, p 86-100). They distinguish it from other destinations, so that a target group will prefer Romania to other destinations that offer similar benefits for travel.

Romania's natural wealth is unrivaled in Europe. There are real treasures, unique geographical areas that are still wild such as the Danube Delta and the Carpathians in certain regions. In addition, Romania has many ecologically protected areas - with unpolluted flora and fauna, species that can hardly be found in other countries. Romania is a call for nature lovers and adventurers seeking to reconnect themselves with nature.

Ranging from fresh healthy food and natural wines, from the original local festivals, to the accommodation experiences in villagers' households or in modest but warm and welcoming guesthouses, all this is authentic, entirely Romanian and is provided open-heartedly. Rural traditions in particular are visible to visitors, and their values are inherited from generation to generation. Peasants distinguish themselves through their great warmth and native sense of humor and visitors will find it as a treasure.

The Romanian people's culture is an exceptional mixture of Byzantine influences upon an ancient foundation of Latin origin, a cultural combination that is unprecedented in the world. You can see it, hear it and enjoy it in almost every town, city, monastery or historic site in the country.

	What can be found in Romania?	Where to find:
Unaltered nature and scenic landscapes	<ul style="list-style-type: none"> • Well protected nature and national parks, • Isolated beautiful landscapes, • Areas with rare flora or fauna, • Sound ecosystems. 	<ul style="list-style-type: none"> • The Carpathian Mountains • Inland hilly areas, • The Danube Delta.
Genuineness	<ul style="list-style-type: none"> • Ancient traditions, • Simple rural life • Locally produced organic food • Typical local architecture. 	<ul style="list-style-type: none"> • In every rural area of Romania e.g. in Transylvania, Maramureş, Bucovina, Dobrudgea • In medium-sized villages or towns, • Generally in small hotels, guesthouses and restaurants.

What can be found in Romania?	Where to find:
<p>Unique cultural heritage</p>	<ul style="list-style-type: none"> • Sites of UNESCO world heritage, • Latin and Byzantine historical cultural heritage, • Castles, monasteries and churches, • German cultural heritage, • Well-preserved historical urban centers.
	<ul style="list-style-type: none"> • Ancient cities of Sibiu, Braşov, Sighişoara • Painted monasteries, • Dacian fortresses, • Wooden churches of Maramureş • Painted monasteries of Bucovina.

Figure no. 5. Main differentiation elements

Arguments are the factors determining the credibility of tourist destination’s differentiating elements (Seddighi HR and Theocharous AL (2002), 475-487, Middleton, VTC, Clarke, J., 2001). Romania’s differentiating elements can be identified by an overview of our country that will make people understand why pride regarding the Romanian landscape and culture is justifiable.

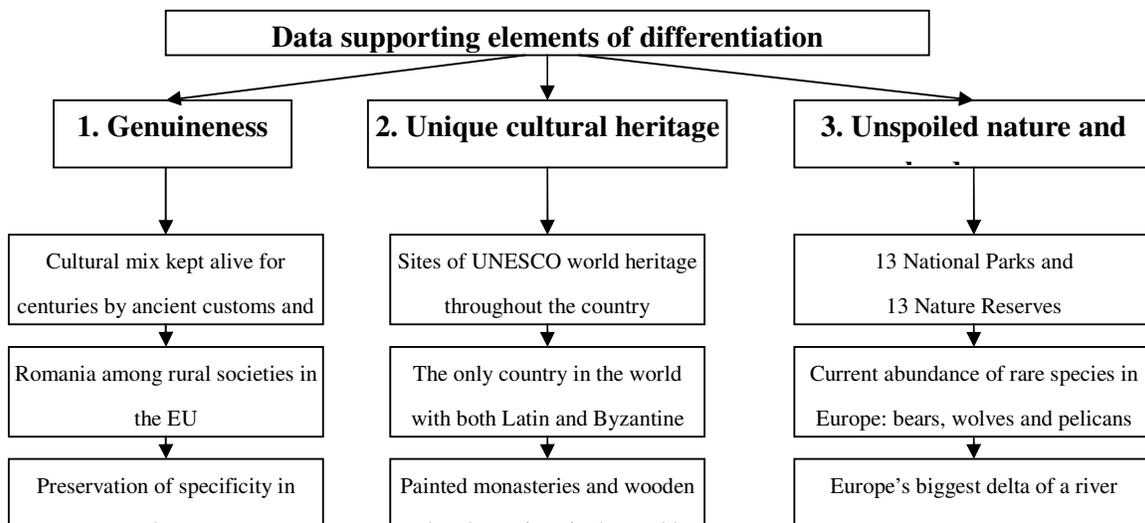


Figure no. 6. Landmarks supporting differentiation elements

Even in the 21st century, *genuineness* in Romania is still at home, our country being one of the those in Europe having the best kept traditions and one of the last getaways in terms of traditional life styles. A shelter for century-old legends and folklore, for organic food in its original meaning, Romania offers unique local music, playing the pan flute being perfected by the Romanians along with dances typical of each region. Genuineness is noticeable everywhere, our guests being able to enjoy a traditional soup or a glass of plum brandy, the freedom to merely wander on the streets of fortress cities such as Brasov, Mediaş, Sighişoara, Sibiu – a European Cultural Capital in 2007.

Culture refers to the unique cultural heritage of Romania reflected in the sites of UNESCO World Heritage (i.e. the fortified sites and churches in the villages of Transylvania, the Hurezi Monastery,

Moldavian churches, the historical center of Sighișoara, the totality of wooden churches in Maramureș, the Dacian fortresses in the Orăștie Mountains, the Danube Delta Biosphere Park), spread across the country. These are essential elements of unparalleled culture: there is no other place where you can find such a mix of cultural heritage. Ranging from the Roman and Dacian ancient influences to Byzantine, Slavic and Latin influences, Romania is a special blend of heritage items. Picturesque testimonies of our country's uniqueness are for example the painted monasteries which can be found only in Romania.

Nature. There are thirteen protected natural areas covering more than 7% of Romania, representing clear evidence in favor of our country's intact nature. Our country is crossed by the longest part of the mighty river, the Danube, the longest river in the European Union, which flowing majestically into the wonderful delta it has formed on our country's territory. The Danube Delta provides shelter for many species of insects, birds and animals, of which some are endangered in other areas. Above all, the mystics Carpathians overshadow our country's land, being one of the largest mountain ranges in Europe with many areas still unexplored. Our country's forests host 40% of Europe's number of brown bears, one third of the world's number of wolves and many rare species. Romania is a paradise for nature lovers.

4. Brand Personality

Brand personality reflects both Romania's view seen from abroad and the Romanians' opinions, both among travellers and among those who work in tourism.

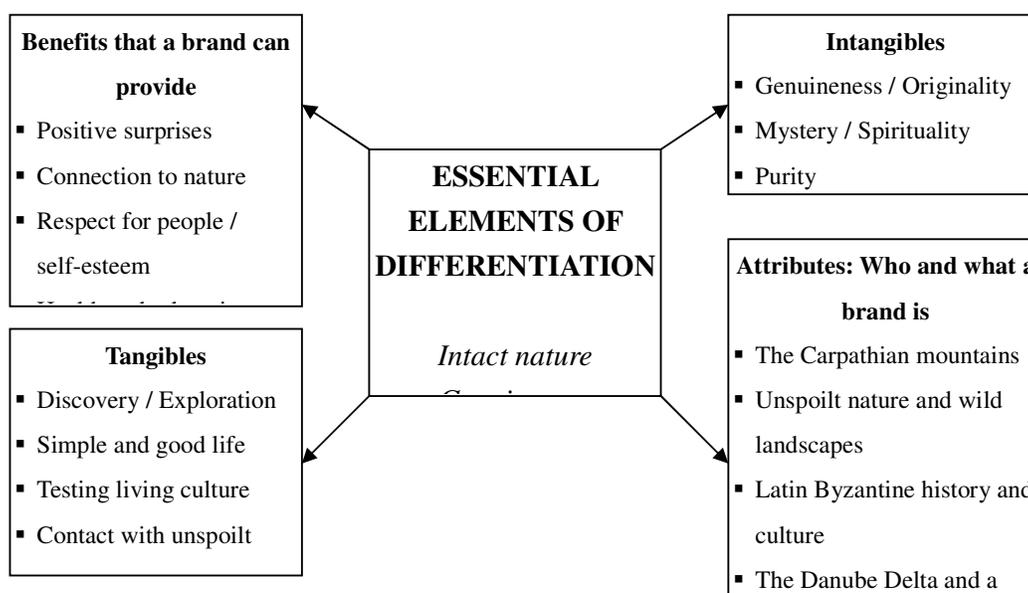


Figure no.7. Brand personality components

The significance of brand components that define brand personality includes:

Green and rural areas. Green is the color of nature in Romania, a color that extends naturally to the concept of tourist brand. Romania's climate, mountains' height and type of agriculture are the foundation of this color's prevalence. Romania is not only a country blessed with beautiful and abundant nature, but also a nation that lives close to nature and from nature. A significant part of Romania's population lives in rural areas, producing and consuming organic and healthy food and living mainly from

agriculture, with many joys, traditions and celebrations being related to that. "Green" is more than a color, it is a lasting and positive lifestyle that allows the protection of natural resources. Agriculture is still far from the level of industrialization in other countries and it is still in the "hands of man" which makes it more accessible and attractive to travellers wishing to enjoy "green" and healthy holidays.

Being *genuine, pure and innocent* assumes that industrialization is not yet as advanced as in European Union countries, and tourism has not yet the modernism and progress of other destinations.

To those looking for unique travel destinations, Romania can be a solution, as in many areas of the country nature is in its pure state.

"Local" is more important than "global" in many regions of Romania. As the world becomes more homogeneous as a result of culture influenced by multinationals, Romania retains its local traditions, clothing, food, drink, music, dances and stories in its rural areas. Although vanished in other countries long ago, in Romania these aspects are not artificially maintained or restored to entertain tourists, but they are real, authentic. There is no need to organize local dance festivals for tourists, since almost everywhere there are such events that can be seen. There is no need to tell people to dress in traditional costumes at local events, because they do that anyway. There is no need to prepare people to show "smiley faces" because their sincere and deeply moving smiles are naturally Romanian hospitality.

Friendly and warmhearted is how a Romanian ready to accommodate guests and tourists of all categories is.

The Romanians smile a lot, they are open and have a great sense of humor. They do not instantaneously smile to any stranger, but a traveller who wants to know them will be able to discover and enjoy incredible warmth and honesty when getting closer to the locals that will both surprise and delight them. The Romanians like talking, telling jokes; there is an amazing wealth of fascinating stories that can be shared. Hospitality is sincere; services are not luxurious or modern everywhere, but there is always sincere hospitality, friendliness and warm, a traveller being spontaneously invited as a guest to lunch or to a local party. This can be a truly unforgettable experience.

5. Visual Identity and Slogan of a Brand

To really highlight and achieve the recognition of interests and differences, creative thinking is needed not only to express brand identity but also in basic messages communicated through the media mix used to accomplish a desired brand exposure.

Strategic thinking is required to ensure that messages are correctly sent to the right people at the right time ... and more importantly they have the desired effects.

The elements of visual identity and a slogan do not represent and do not describe a brand. These are just an "anchor" to remind of a set of perceptions that make it up (Cai LA, Gartner WC, Munari AM, 2009). Thus, when seeing the visual elements, the key attributes, values and personality of a brand will be acknowledged. Visual elements should not communicate or show something explicitly (N. Morgan, A. Pritchard, 1998). They will be known from all communication activities that have used a brand such as advertising and promotion in printing, television, online etc.

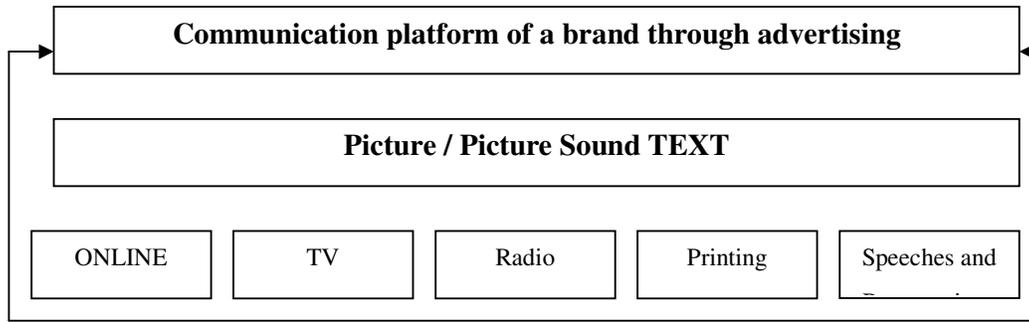


Figure no. 8. Media communication of a brand

Photos/Pictures. For a positive effect, it is recommended to give up photographs that have passive, generic styles and look like postcards, and to replace them with images focusing on people, images typical of the dynamic and active image concept (N. Morgan, A. Pritchard, 2001). For example, a picture using active frames, animated frames, images of "real people", attractive and suggestive landscapes which a visitor can identify with is very useful. Artificial, digitized coloring should be left aside in favor of using natural, genuine colors as can be found in Romania.

The "discerning traveler" must also be shown discovering hidden aspects of Romania and living unique travel experiences.

Finally, pictures must depict selected tourist products.

Music/Sounds. The music used must be in harmony with the main attributes and elements of brand differentiation (genuineness, nature) avoiding the music of the current European trend. Music must be adapted so that to perform as a stand-alone song that conveys different messages (N. Morgan, A. Pritchard, 2009).

It is recommended that, in compliance with the above, it should sound Romanian (keeping in mind that target audience should be attracted to it), perhaps using local and / or traditional musical instruments approaching the 21st century where even the sounds of nature can be integrated. The type of music must also be adapted to the product/video/picture shown.

For example, a message such as "Action and Adventure" can have a more "wild-like" background music than a message on "Wildlife and Natural Parks" where it is recommended to use slower music.

Local composers should get involved in creating specific themes for commercials, adapted to our country's characteristics, using different instruments, without confining to traditions.

A text is the message content defined by short phrases situated above (or near) the descriptive body of a text (N. Morgan, A. Pritchard, 2001) that is to appear in subsequent campaigns.

Key information must be sent using short message as well as the most relevant attributes, benefits and differentiating elements with the highest intensity: genuineness, nature and culture.

A Slogan: The "Carpathian Garden" promotes the strongest tourist asset in the country according to market research. The "explorer" theme clearly indicates the type of target traveller, their favorite activities as well as the benefits they can enjoy in various destinations in Romania. As in the case of visual aspects, the graphics and slogan have been selected after repeated market testing.

explore the Carpathian garden

Using the handwriting style for the word "Romania" reinforces the idea that there is no font used,

but a drawing created especially for Romania, which expresses unique personality based on genuineness and originality. There is only one capital letter which highlights the differentiation element, the Carpathian Mountains.

explore	the Carpathian	garden
<ul style="list-style-type: none"> • Gentle, inviting imperative. • Lets a target segment recognize itself. • Precisely reflects the reference background of ranking. • "Explore" applies to most key products. • Conveys the message that there is something new, unexplored, not assaulted by the masses, as the main selection criterion for a target segment. 	<ul style="list-style-type: none"> • The Carpathian Mountains have resulted from market research and preferences of different parties involved in the Romanian tourism as the most powerful element of differentiation in Romania • The Carpathians offer the best feedback of those who have been to Romania • The last wild, untamed mountain range which significantly contrasts with the highly developed and crowded Alps and Pyrenees. • Linking the mountains' name to Romania, even if they are part of neighboring countries too, renders geographical identity to the country helping it to get rid of its being rather "unknown". • Contrast with a civilized garden: an unspoiled place still having wild nature, as the dream of a target segment. • A name that is easy to connect with stories and myths. 	<ul style="list-style-type: none"> • A beautiful metaphor symbolizing the country; it carries one's thoughts to walking through a garden and visiting its attractive places. • The word is also intended to cancel the perception of safety lack found on main markets. • In contrast with the wild Carpathian mountains, it indicates that they are accessible. • A garden is a symbol of care and growth, a place filled with peace and health, a place to visit with family and friends, a place to relax. • An excellent connection to healthy organic food, so important to a target group. • A garden is planted and has something different to offer in all seasons. • A garden is something you do not share with others, it is rather a personal place • Only one uppercase – C - highlights the differentiation item, the Carpathian Mountains

Figure no. 9. Description of the slogan

The two components of the tourist brand of a tourist destination are the isotype and the logo (S. Pike, 2008). An isotype is a conceptual construction or description of an idea. A logo is the phenomenon that gives meaning/name to a brand.

A logo and an isotype should never be used separately.

An isotype used alone cannot be recognized, thus losing its effect. Only very famous brands such as Nike or Mercedes can use their symbols without a name and because their symbols are visible on their products and can be seen by consumers every day.

Moreover, a logo should not be used alone because it can lose everyone's appreciation and can create confusion to consumers (T. Selwyn, 1996). The size of a logo and isotype are designed so that they can be used together in any circumstance.

In the case of Romania, its logo is written with letters imitating handwriting, having personality

and a clear, friendly and original drawing. It is a visual label with simple, strong and optimistic shapes.



The *isotype* represented by a leaf reflects the basic principle of nature which addresses a Romanian soul through the folklore sources of "FOAIE VERDE – En. “GREEN LEAF” (it is an expression used in many Romanian traditional songs, showing the connection with nature); it can occasionally can resemble the shape of a mountain, whereas the blue tail represents the importance of water and the Danube River.



The *colors* used are shades of true green representing the natural wealth of forests, countryside and mountains. The curves recall one of the Carpathians and the hill-valley horizons of the landscape. In the middle, the circumflex diacritical mark characteristic to Romanian grammar is arc shaped pointing upwards, painted in warm colors to create contrast, reputation and vitality.

6. Brand and Communication Strategy of a Brand

A brand strategy is the key to success, being more important than the design of visual identity elements or than a slogan, for example. A brand can be successful only if the implementation of an effective strategy adds value and strength to it. This value must be communicated, but above all, it must be attributed to Romania. Positive travel experiences that fulfill the promises made by a brand stimulate today the strongest forms of marketing: viral marketing and direct marketing. The credibility and impact of real travelers’ opinions are becoming increasingly important. Thus, communication and value provision must act in parallel, mutually reinforcing each other.

	Brand communication objectives	Defining the key objectives for each type of communication (to be reached in 2020)
Inform	1.Raising one’s awareness	Internal: Increasing the number of Romanians who know most sights in Romania: from 40% to 75% External: Doubling the number of people who can think of Romania as something unique: from 30% to 60%
	2. Increasing the level of understanding	External: Doubling the number of people who can name one of the unique features of Romania (especially with focusing on culture and nature): from 27% to 50%
Motivate	3. Improving an image	Internal: Increasing the number of Romanians who believe that holidays in Romania are better than abroad from 26% to 45% External: Increasing the number of foreign tourists who have a rather positive view of Romania from 45% to 65%

	Brand communication objectives	Defining the key objectives for each type of communication (to be reached in 2020)
	4. Explanation of attributes and benefits	External: Doubling the number of people mentioning the positive elements spontaneously associated with Romania as compared to the people mentioning negative items from 26% to 50%
	5. Creating preferences	Internal: Increasing the number of tourists that prefer Romania to other destinations from 26% to 50% External: Regarding the six top products, Romania will be perceived as more attractive than all its competitors
Act	6. Encouraging sales	Internal: Increasing the number of Romanian agencies which are ready and sell destinations in Romania by 50%. External: Increasing the number of tour operators and travel agencies that sell destinations in Romania by 25%
	7. Encouraging demand repetition	External: Increasing the number of returning visitors from 56% to 75%
	8. Encouraging recommendations	Internal: Increasing the number of Romanians who recommend their country as a holiday destination to other Romanians and foreign citizens. External: Increasing the number of foreign visitors' recommendations from 50% to 70%.

Figure no. 10. Objectives of brand communication

How to start or develop a brand involves a series of steps that take into account both domestic plans and the reference market context. Many times things are done step by step, intuitively, depending on immediate opportunities and constraints, overlooking the usefulness of a well-developed plan, covering all the objectives, stages, resources, means of implementation and results' evaluation criteria. A strategy is what most often acts in favor of a brand or another.

In order to meet the requirement of promoting national tourist destinations, attention needs to be paid to the implementation of promotion, advertising and public relations activities having a role in increasing awareness regarding destinations and tourist products through personalities that have national and international recognition in different fields such as arts, culture, sports, science and the like, as vectors for promoting Romania's tourist brand.

7. Conclusions

The development of a national tourist brand has an impact on medium term both on the country brand development as well as on the growth of domestic and foreign tourist markets. Tourism is one of the axes that generate income to the government and a tourist brand is only a part of a country brand - indeed an important one through the high visibility it enjoys. The development of a national tourist brand is particularly important as Romania does not have a sharp image as a tourist destination, with its internal and external promotion quite inadequate and undersized.

Therefore, this activity must overcome the identity crisis that Romania faces today. A wider involvement in promoting national resources and values would generate benefits for various categories: raising living standards through the expansion and development of economic activities, openness to what a value system means in tourism and sustainable tourism, attracting foreign investors, new business opportunities, increasing public confidence in the business environment, international fundraising for developing ecological and cultural projects etc.

The investigations carried out so far have showed that Romania currently has a rather negative image and one of the main objectives is to make Romania known as a tourist destination. One of the ways that can increase awareness is running a campaign sustained by promotion to address a target audience whose profile is defined in a brand strategy.

The overall objective of such a campaign is to promote the national tourist brand in order to create a positive image of Romania as a tourist destination, by better ranking our country at international level and increasing the demand for tourism in Romania, on the main priority markets identified.

Promoting a successful national tourist brand will enable Romania to create its positive view as a quality tourist destination based on its natural and cultural heritage that meets international standards as to delivery of products and services, and to achieve sustainable development of its tourist sector in a growth rate superior to other tourist destinations' in Europe. Therefore, more information and promotion campaigns need to be carried out to support a brand and convey communication messages to the target groups taken into account.

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