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TRADE FLOW ANALYSIS AND DEVELOPMENT STRATEGY OF INDONESIAN LOBSTER EXPORT

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ABSTRACT

Lobster (*Panulirus sp.*) has a great potential to be developed as export commodity. Moreover, there is increasing trend global consumption of fishery products. However, Indonesia faces many challenges in the midst of intense competition in the globalization era. The export volume and value of Indonesian lobster is declined in recent years. This study aims to analyze factors affecting trade flows of Indonesian lobster export and to formulate alternative development strategy of Indonesian lobster export. Data collected from secondary sources and interview with stakeholders related to Indonesian lobster export. This research used export demand function by panel data to analyze trade flow and alternative strategies are formulated using Analytical Hierarchy Process (AHP). Estimation of panel data shows that all the factors affecting trade flow of Indonesian lobster exports to the destination countries (Gross Domestic Product per capita, economic distance, exchange rate, export price, and free trade agreement) significantly affect lobster export value. Based on Analytical Hierarchy Process (AHP) analysis, alternative strategy that has the highest priority is the development of infrastructure and aquaculture technology, followed by trade regulation, and product quality improvement.

KEYWORDS

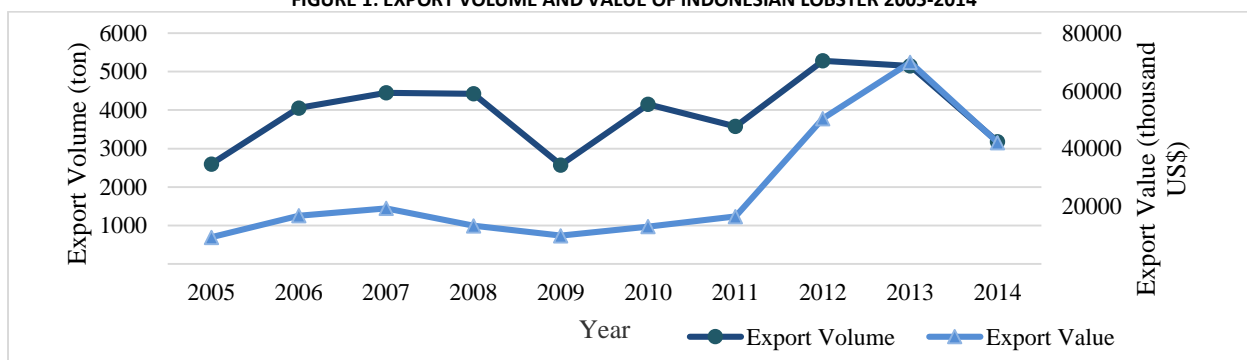
AHP, export demand function, lobster, strategy.

INTRODUCTION

The fisheries sector contributes significantly to the Indonesian economy. It can be seen from the contribution of the fisheries sector to National Gross Domestic Product (GDP). In 2014, the GDP of fisheries subsector contributed 3.37% to the national GDP. In the agricultural sector, the fisheries subsector was ranked second after the food crops in giving the largest contribution to the National GDP. In addition, GDP growth rate of the fisheries subsector was the highest among the other agricultural subsectors. The GDP average growth rate of the fisheries subsector during 2010 to 2014 was 14.31% (Badan Pusat Statistik 2015). Furthermore, the fisheries sector also contributes in generating foreign exchange. Data from the Ministry of Maritime Affairs and Fisheries (2015) showed that the performance of fishery commodities trade balance in the period of 2010-2014 was positive. The export value of fishery commodities grew on average by 5.48% in that period. Indonesian fishery trade performance also supported by increased of world demand to the fishery commodities. The transition of protein consumption trend from red meat to white meat cause the increasing of fishery commodity demand.

One of commodity that could potentially developed for export is lobster, or known as the *udang barong* as the local name. According to Boesono *et al.* (2011), crawfish (*Spiny lobster, Panulirus sp.*) is marine fisheries commodity which has important role as a commodity exports of crustaceans (*Crustacea*) after Penaeid shrimp. Based on data from United States Department of Agriculture (USDA) (2009), in 2006 Indonesia was the fifth largest lobster producer after Canada, the United States, Australia, and the Bahamas. Moreover, lobster is the one of fisheries commodity that has high economic value. The average producer prices reached Rp 211 981 per kilogram in the period of 2011-2014 (BPS 2015). Based World Wildlife Fund for Nature (WWF) (2014), the price of lobster is also influenced by the fishing season, when the season was good, lobster prices are not too expensive. However, when the dry season lobster prices will be more expensive. The price of the most expensive lobster that is when the Chinese New Year because demand is very high and the price can reach Rp 500 000/kg. Besides catching season, the price of lobster is also depending on completeness of legs and will fall when three legs had broken.

FIGURE 1: EXPORT VOLUME AND VALUE OF INDONESIAN LOBSTER 2005-2014



Source: BPS (2015c)

The high global demand for lobster create export market opportunities for lobster Indonesia. Based on Jones *et al.* (2008), lobster export market include countries in Southeast Asia, Hong Kong and Taiwan as the main market, although there are also products that are sold directly to the northern region of China, Singapore, and Japan. However, the export volume of lobster Indonesia has decreased in recent years. In 2014 there has been a decline in exports of fresh and frozen lobster by 38%, from the previous 5 thousand tons to 3,2 thousand tons. In addition, the export value of lobster in 2014 also declined by 40% from the previous year (BPS 2015). This is presumably because the export of Indonesian lobster breeder massively into Vietnam. Therefore, in 2015 the government issued The Regulation of Ministry of Maritime Affairs and Fisheries 1/ Permen-KP/ 2015 about catching lobster. Supported by data from BPS (2015c), that In 2013, Indonesian lobster breeder export to Vietnam amounted to 10.3 tons and increased double by in 2014 to 24.6 tons.

REVIEW OF LITERATURE

Previously, there are some studies that analyze the factors that affect the export trade flows, such as research conducted by Szczepanski (2010) for shrimp commodity, Anindya (2013) for fish and shrimp commodity to Europe, and Natale *et al.* (2015) for international seafood commodity.

Research conducted by Szczepanski (2010) aims to look at the effect of food safety at the international shrimp trade. This study involves volume of shrimp export as the dependent variable and the independent variables are supply of export countries, GDP, distance, rate, maximum residual levels of oxytetracycline, the common language dummy, and membership in trade associations. The results shows a significant effect on all variables except the variable GDP and EU membership.

Anindya (2013) analyze the factors that affect export value of shrimp and fish to Europe. Based on the result of this study, factors that significant affect export value of frozen shrimp is distance, exchange rate, total population (the population), and price. Meanwhile, the factors that affect the export value of frozen fish is another country's GDP, exchange rate, crisis, price, and European policy.

Analysis of the determinants of international seafood trade is a study conducted by Natale *et al.* (2015). The variables that allegedly affect seafood trade flows is the GDP of exporters and importers country, per capita income of exporters and importers country, geographical distance between the two countries, the production of export countries, the consumption of importers country, and dummy regional trade between the two country.

The final goal of this research is to formulate alternative development strategy of Indonesian lobster export. Alternative strategies are formulated using Analytical Hierarchy Process (AHP). There are some previous research on the development strategy of export using AHP. Dradjat and Bustomi (2009) examined alternative development strategy of Indonesian palm oil exports. AHP hierarchy in this study consists of four levels: factors, actors, objectives, and alternative strategies. Based on the result, the government as a regulator and facilitator of export is very important in the development of palm oil export. In relation to the actors who play an important role, the government became the main actor for the export of CPO. To achieve the desired goal, the actor in the development of CPO export should prioritize infrastructure development strategy followed by the optimization of resources, institutional development, and policy implementation.

Pratiwi (2011) examined business development strategy of Indonesian seaweed for the international market. AHP hierarchy in this study consists of four levels: factors, actors, objectives, and alternative strategies. This research using Focus Group Discussion (FGD) in conducting the preparation of the hierarchy. According to analysis by AHP, recommendation the order of priority strategies that can be applied are 1) the development of processing industry 2) regulation of trade 3) improved product quality 4) increased promotion and cooperation.

IMPORTANCE OF THE STUDY

This research is expected to be used as consideration in policy of Indonesian lobster export development, in order to increase export lobster Indonesia and expand the target market. For the people, this study is useful as a reference and information of lobster trade so that it can be used as a basis for the development of lobster enterprise in an effort to improve the welfare.

STATEMENT OF THE PROBLEM

The development of Indonesian lobster export faces several challenges. It can be seen from the decline in the volume and value of export that occurred in the last few years. This is presumably because the export of Indonesian lobster breeder massively into Vietnam. The high economic value of lobster is one of the factors that led to capture of lobster continuously and do not pay attention to the resources and the environment. Beside that, based on observation, the average of volume and value export of Indonesian lobster in the last three years has decreased in almost all main destination countries (Appendix 1). In addition, with the globalization of trade then it will be an opportunity and a challenge for Indonesia to develop the export of lobsters in the International market. This is of course is an opportunity because international trade will become more open with the signing of various free trade agreements between countries. Indonesia opportunities to marketing the lobster products into international market become widely open. But on the other hand, this phenomenon will also become a challenge because its implications for the increasing competition among countries in marketing their products. Not to mention, there are many destination countries that impose non-tariff barriers, such as European Union countries. Countries in the European Union pay close attention to hygiene and health problems and enforce "foods alert system" tightly so that the exporting company should strive to meet the standards of these countries in order to remain competitive and be able to enter the market of their country.

OBJECTIVES

The main objectives of this paper are:

1. To analyze factors affecting trade flows of Indonesian lobster export
2. To formulate alternative development strategy of Indonesian lobster export.

HYPOTHESES

Based on the previous research, the hypothesis of this research are:

1. The real GDP per capita has positive effect on Indonesian lobster trade flow.
2. The economic distance has negative effect on Indonesian lobster trade flow.
3. The real exchange rate rupiah to export destination countries has positive effect on Indonesian lobster trade flow.
4. The lobster export price has negative effect on Indonesian lobster trade flow.
5. The free trade agreement has positive effect on Indonesian lobster trade flow.

RESEARCH METHODOLOGY

DATA DESCRIPTION

Data collected from secondary sources and interviews with stakeholders related to Indonesian lobster export. Secondary data used is annually time series data from 2005 to 2014 and cross section from several destination countries. Types and sources of data presented in Table 1.

TABLE 1: TYPES AND SOURCES OF DATA

No	Types of Data	Sources
1	Lobster Export Value	UN Comtrade, BPS (Badan Pusat Statistik)
2	Lobster Export Volume	UN Comtrade, BPS (Badan Pusat Statistik)
3	GDP per Capita	World Bank
4	Geographical Distances	www.cepii.org
5	Exchange Rate	World Bank
6	Free Trade Agreements	Ministry of Trade

Meanwhile, the primary data is used to formulate the development strategy of Indonesia lobster export. The selection of respondents using judgmental sampling method. The respondents are from the Ministry of Maritime Affairs and Fisheries, academia/researcher, and businessman.

METHODOLOGY

EXPORT DEMAND FUNCTION

Indonesian lobster trade flow to the destination countries is influenced by many factors. These factors is analyzed by export demand function using panel data model. There are several techniques to estimate the parameters of panel data model, namely: (1) Pooled Ordinary Least Square/ PLS, (2) Fixed Effect Model, and (3) Random Effect Model. The model used in a study needs to be chosen based on statistical considerations. It is intended to obtain an efficient presumption. The variables used are expressed in the equation below:

$$\ln X_{it} = \alpha_{it} + \beta_1 \ln GDP_{it} + \beta_2 \ln DIST_{it} + \beta_3 \ln ER_{it} + \beta_4 \ln PRICE_{it} + \beta_5 FTA_{it} + \varepsilon_{it} \quad (1)$$

X_{it} = Real value of export Indonesian lobster to destination countries (US\$)

GDP_{it} = Real GDP per capita of export destination countries (US\$)

$DIST_{it}$ = Economic distance (km)

ER_{it} = Real exchange rate rupiah to export destination countries (Rp/LCU)

$PRICE_{it}$ = Lobster export price (US\$)

FTA_{it} = Free trade agreement between Indonesia with destination countries

ε_{it} = error term

α = intersep

β = slope

STRATEGY FORMULATION

AHP was developed by Dr. Thomas L. Saaty in the 1970s to organize information and expert judgement in selecting the most preferred alternative. A complex issue will be resolved within an organized framework, so it can be simplified and accelerated decision-making processes. The working principle of AHP is a simplification of a complex problem that is not structured, strategic and dynamic into a parts are organized in a hierarchy. The importance level of each variable then rated numerically by experts subjectively about the importance of these variables in relative terms compared to other variables. After that, through a several of considerations then synthesized to determine which variable has a high priority which have a role to affect the outcome of the system (Marimin and Maghfiroh 2010).

Steps in AHP methods based on the three principles of AHP by Saaty (1991), namely: the preparation of the hierarchy, prioritization, and logical consistency. The first step is the preparation of the hierarchy based on observation, literature review, and interview related with the condition and problems of Indonesian lobster export. After the hierarchy completed arranged, then it will be assessed by pairwise comparison. The next step is to calculate the logical consistency.

RESULTS AND FINDINGS

FACTORS AFFECTING INDONESIAN LOBSTER EXPORT TO DESTINATION COUNTRIES

The export of Indonesian lobster to the top eight export destinations is influenced by many factors. These factors need to be identified and analyzed to determine whether they have significant positive or negative effects on the value of exports. These factors are analyzed using gravity model by panel data regression, during the period of 2005 -2014 (10 years) and eight destination countries, so that the number of data observation are 80. The estimation results of factors affecting Indonesian lobster export to destination countries showed in Table 2 Based on the estimation results of data panel, estimation equation of Indonesian lobster trade flow to export destinations is:

$$\ln V_{Xit} = -38,123 + 8,176 \ln GDP_{it} - 1,357 \ln DIST_{it} - 3,098 \ln ER_{it} + 0,820 \ln PRICE_{it} + 1,363 \ln FTA_{it} + \varepsilon_{it} \quad (2)$$

GDP, PRICE, and FTA has a positive and significant relationship to the dependent variable (lobster export value). GDP estimated value is 8.1756, it means that if GDP increased by 1%, then lobster export value increased by 8.1756% (ceteris paribus). Coefficient of GDP variable is the largest compared with other variable, this suggests that influence of GDP variable to the lobster export is the largest than the other variables. It shows the characteristics of lobster as a luxury product that lobster demand is increasing along with the increasing of GDP per capita. The results is consistent with the hypothesis and in line with research conducted Ibrahim (2012); Khan *et al.* (2013); and Suryana (2014).

TABEL 2: THE ESTIMATION RESULTS OF DATA PANEL

Variable	Coefficient	Probability
Constanta	-38.1227	0.0000
Real GDP per capita of export destination countries	8.1756	0.0000
Economic distance	-1.3572	0.0285
Real exchange rate	-3.0975	0.0000
Export price	0.8195	0.0000
Free Trade Agreement	1.3634	0.0000
Weighted Statistics		
R-squared	0.9763	Sum square resid 76.2206
Prob (F-statistic)	0.0000	Durbin-Watson stat 2.1065
Unweighted Statistics		
R-squared	0.7929	Durbin-Watson stat 2.1518
Sum square resid	62.6148	

Export prices also have a positive relationship, if the export prices increased by 1%, then the lobster export value increased by 0.8195% (ceteris paribus). These results are not consistent with the hypothesis, possible reason for this condition is because the dependent variable used is value of export lobster, so that the export value and lobster export prices had a positive linear relationship. Meanwhile, with the free trade agreement made between the export destination country and Indonesia, the export value of Indonesia lobster is higher 1.3634% than export value without a free trade agreement between the two countries. This is consistent with the hypothesis, and in line with research by Boansi *et al.* (2014) and Natale *et al.* (2015).

Variable DIST and ER has a negative and significant effect on the dependent variable (exports). If the economic distance between export destination with Indonesia increased by 1%, then the export value decreased by 1.3752% (ceteris paribus). The farther the distance between the two countries, it will lead to increased transportation costs, which will increase the price of goods and services to be traded. This results consistent with research conducted by Yuniarti (2007), Akyuz *et al.* (2010), and Setyawati (2015). If the real exchange rate increased by 1%, then the export value decreased by -3.0975% (ceteris paribus). This is not consistent with the hypothesis, this condition is in line with previous studies conducted by Sari (2013) and Sudiyan (2015). It is possible because the characteristics of the lobster as a luxury commodity. So if the price of commodities more expensive, it will be more sought after by the importing country.

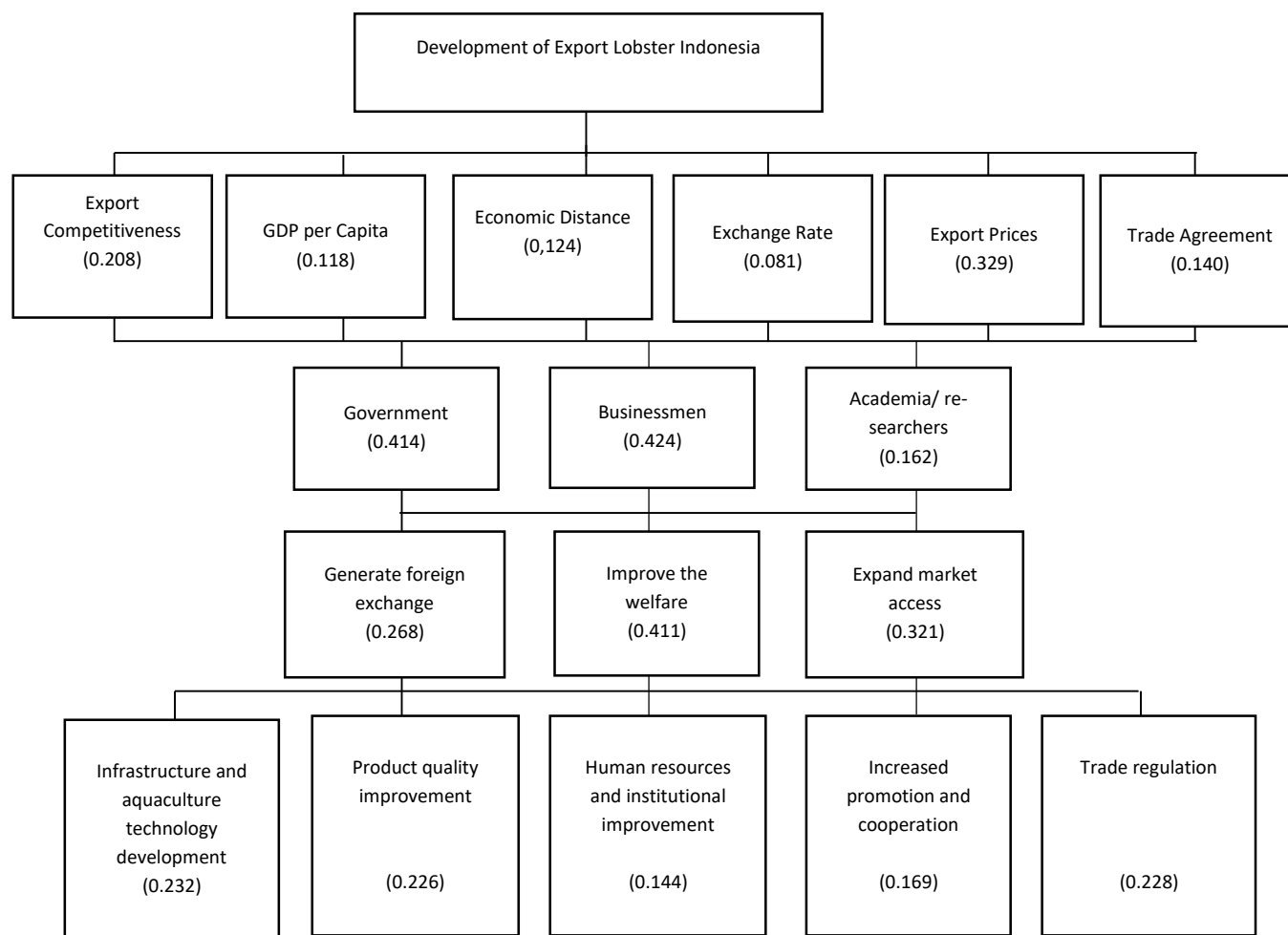
According to Chow and Hausman test, this model has met the criteria with a probability value 0.0000 < 5%, FEM is better used instead of REM. In the estimation results, all variables (GDP, DIST, ER, PRICE and FTA) significantly affecting the VX. The coefficient of determination (R^2) is 0.9763. This means, the changes in export value can be explained by the independent variable amounting 97,63%, while the remaining 2.37% is explained by other factors outside the model. This model does not have a problem of autocorrelation, since the value of DW-stat has met the criteria on 1.507 < 2.1065 < 2.228. Multikolinearitas detected by looking at the number of independent variables were significant at 5%. In addition, the value of the correlation matrix between variables is less than 0.8 and less than the value

of R^2 (0.984), so it can be concluded that this model does not have multicollinearity problem. Sum square resid value at weighted statistics is 76.2206 more than sum square resid value at unweighted statistics amounting 62.6148. Thus, we can conclude there is no problem heteroscedasticity. The estimation results of the panel data indicate a probability value of Jarque Bera is 0.5428 thus more than 5% significance level. It can be concluded that the error terms in this model has a normal distribution.

STRATEGIC DEVELOPMENT OF INDONESIAN EXPORT LOBSTER

Based on observation, literature review, and interviews related to the condition and problems of Indonesian lobster export, then arranged a hierarchy to formulate export development strategy using AHP (Analytical Hierarchy Process). The result of AHP showed in Figure 2.

FIGURE 2: HIERARCHY STRUCTURE OF DEVELOPMENT STRATEGY OF INDONESIAN LOBSTER EXPORT



Alternative strategy that has the highest priority is the development of infrastructure and aquaculture technology. The strategy of infrastructure development can be done with facilitate the breeding and processing industries, construction of port facilities, construction of supporting facilities for the implementation of cold chain system, and the provision of gas stations in the centers vessels catching lobster. Meanwhile aquaculture technology development includes technologies for seed collection and enlargement lobster. Based on Jones (2008), Indonesia can adapt/ transfer lobster enlargement technology from Vietnam. The technology includes seed collection puerulus swimmer, young lobster collection, and construction of hall (place) to aquaculture and feed production.

Trade regulation is the second highest priority that suggested. Trade regulation strategy that can be applied is service improvement and acceleration of export and import licensing, so as to facilitate businesses, especially exporters to conduct its business. Trade licensing that exist today is still tricky and spent a long time. Another strategy through the Ministry of Maritime Affairs and Fisheries is necessary to review the regulatory provisions of catching lobster. Regulation that limit the size of catching lobster is considered detrimental to the farmers because the fact is very difficult to find lobsters the size required under the regulation. As a result, the volume and value of Indonesian lobster export has decreased in recent years.

The third priority suggested is improvements in product quality. This alternative strategy intended to lobster Indonesia so able to meet the standards that have been set so as to have high value and can penetrate the global market. This is in line with research conducted by Batt and Morooka (2003), that consistency of quality is the most important attribute sought by importers of Japanese lobster. The strategy for improving the quality of the product can be done by applying Good Aquaculture Practices (GAP), standardization of product quality that is setting standards of product quality lobster accordance with Indonesian National Standard (SNI) and international standards, and increase in value-added products through incentives for the development of refined products and the development of the variety of products through research and development activities. In addition it is necessary to develop further research in developing methods of aquaculture and creating a quality seedlings lobster.

SUGGESTIONS

Based on the result of this research, there are some managerial implication that can be considered are as follows:

- For the government, it is necessary to diversify the market, sale and trade missions, and participate in multilateral and bilateral forums. These are as effort to introduce Indonesian lobster products in international market as well as seeking potential buyers. In addition, in order to improve the competitiveness of the lobster, the government needs to develop infrastructure and services that support business activities lobster. Governments also need to review the regulation of catching lobster so that it can remain sustainable while not detrimental to farmers lobster.
- For businessmen, the effort that need to be considered to win the competition in the international market is to improve the quality of lobster products to be exported. Lobster exports must be able to meet the standards that have been set so as to have high value and can be highly competitive in the global market, especially the market of countries of the European Union which pays close attention to hygiene and health problems and enforce "foods alert system" strictly.

- c. For academics/ researchers, it is necessary to develop market research to find out which country the potential to be developed as the export target. Especially countries that have a high and high intermediate per capita income. In addition, in order to improve product quality researchers also need to develop methods of lobster rearing and create quality seedlings lobster.

CONCLUSION

Estimate of panel data shows that all the factors affecting trade flow Indonesian lobster exports to the destination country (GDP per capita, economic distance, exchange rate, export price, and free trade agreement) are significantly affect the value of lobster exports. Based on the pairwise comparison using AHP, alternative recommendations that are prioritized in the development strategy of export lobster Indonesia are infrastructure and aquaculture development technology, followed by trade regulation, and improving product quality.

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APPENDIX

APPENDIX 1: EXPORT VOLUME (TON) AND VALUE (US\$ 1 000) OF INDONESIAN LOBSTER TO MAIN DESTINATION COUNTRIES 2012-2014

Country	2012		2013		2014	
	Volume	Value	Volume	Value	Volume	Value
China	2 522.82	24 455.63	3 750.87	51 341.09	2 066.38	26 103.98
Hongkong	914.97	7 727.11	459.18	5 033.67	301.77	2 766.61
Taiwan	528.97	8 013.31	359.98	8 246.46	404.25	9 873.92
Japan	543.40	8 288.89	157.76	3 113.59	21.74	355.17
Malaysia	357.95	832.15	197.88	394.69	119.93	260.00
Singapore	124.61	613.78	59.83	421.23	109.32	693.00
Australia	38.19	481.92	58.72	672.23	48.45	550.18
United States	2.84	23.92	4.36	47.20	1.97	24.21

Source: BPS (2015c)

A STUDY ON TELEVISION ADVERTISEMENT IMPACT ON PURCHASE PSYCHE OF A CONSUMER**NAVEEN.V****ASST. PROFESSOR****DEPARTMENT OF COMMERCE & MANAGEMENT****NEW HORIZON COLLEGE****MARATHALLI, BANGALORE****DR. SANJEEV PADASHETTY****PROFESSOR****DEPARTMENT OF BUSINESS ADMINISTRATION****ALLIANCE UNIVERSITY****ANEKAL, BANGALORE****ABSTRACT**

In recent years Television has become a very important fixture in Indian households. This aspect has made every company to choose Television as a prime media for their advertisement which can impact at large population. TV Viewing in India is increasing over the years. TV is viewed more by children compare to other category of viewers. TV ads create subconscious influence on consumer. TV ads will have impact on viewers'. Strategies are used by companies to increase the profit and sales but it might not be successful because consumers are not just influenced by TV advertisement, there are various other factors influencing their buying psyche. An attempt has been made to analyse the influence of television on consumers purchase psyche.

KEYWORDS

television advertisement, consumers, celebrities, purchases psyche, consumer behaviour.

INTRODUCTION

Advertising aims at influencing viewers to purchase the products. It targets different category of people. Advertising originates from the Latin word 'advert' which means 'to turn around' (Ramaswamy and Nama Kumari, 2004). Advertising is any paid form of non-personal promotion and presentation by an identified sponsor of ideas, services, goods or products (AMS 2000). Advertising is any human communication that aims at influencing buyers in their buying decisions. (Cheng, 1996). Indian's psyche is very important to understand by the advertisers. The advertiser aims to spread the ideas about his products and services to customers through different medium of advertising like newspaper, radio, magazines, television, outdoor display, banners, etc. Promoting of the product is the basic intent of advertising (Ramaswamy and Nama Kumari, 2004). Though advertising is not criteria but sales are key milestone of successful advertising. It aims at contributing or building of successful brands (Kapoor, 2004). Thus, the basic purpose of an advertisement is to make customer more flexible to take purchase decision. Advertising generates increase in production, distribution and improved availability of goods and services and it produces more employment opportunities (Geetha and Dhanabhagyan, 2006). Advertising spending has seen a growth of 15.5% in 2016 to Rs.57, 485crores (groupM report, 2016). TV advertisements influence the customers and their cultural and social surroundings, few also influenced by colour used in TV ads. A consumer's buying psyche will be influenced by the usage of colours, ambience of the ads, and the stay line built in the ads which connect to the customer's lifestyle. (Priya Gupta, Pooja Sharma, 2015). Brands rely on advertising media for many marketing objectives like increasing sales, creating knowledge, awareness in the market, creating brand loyalty, etc. (GargiBarve, S. Nithy, 2015). The field of advertising continues to evolve and grow. It has a vital role in changing norms of society both globally and nationally. Emergence of criticisms regarding the role of advertising in our society is a concern. Advertisements have played a major role in a teenager's socio-economic development and well-being. It is argued that children are more vulnerable to advertising as they lack the experience and understanding knowledge to evaluate the purpose of the persuasive advertising appeals. Criticizers also feel that children cannot differentiate between commercials and programmes and cannot distinguish between reality and fantasy. However, advertisers cannot deemphasise in the dynamic nature of our society and it is a powerful tool in influencing the socio economic relations.

The present research has been conducted to explore the effect of TV advertising on purchase behaviour of Indian customers. The spending of advertising companies on TV advertising is higher at Rs. 27,074, 47% of total Rs.57,485 crores. India's advertising industry to grow at 16.8% year on year to Rs.51,365 crores.

TELEVISION VIEWERS IN INDIA

In India, television started functioning as a state owned medium in 1959 as a pilot project in New Delhi. In early seventies, the fancy of TV viewers was caught by Sunday feature films. The early TV ads were merely short version of cinema ads or stills with voice overs. The first TV ad was Topaz blade stills (Venkatarama Murthy, 2013). Local brands were brought into national prominence through TV ads like Nirma. Gradually TV viewing is shifting from live programming to online viewing or using mobile devices, digital note pads (Nielsen, 2011).

Indian adolescents watch TV for 12 hours per week on an average, a study says that major source of stress relieving activity is TV viewing (Larson and Varma, 2002). Most of the children watch TV during bed time, 2 hours or less time is spent on daily basis. Primarily children watch TV for entertainment and for learning. The most preferred program by children was animated or cartoon programs and children's shows or serials (Aluwalia and Singh, 2011).

Television became commercial in 1976, later it transformed into colour in 1982. Over the time, television has become a prominent culture in Indian households irrespective of income or status of people (BARC- Broadcast Audience Research Council ;(vanitaKohil- Khander, 2016). In India, 153.5 million TV households of which 77.5 million are urban India and 76 million are rural India. 82.5% of the country's total population has physical coverage of television. Television programmes reach nearly 90% of population in India out of which nearly 50% of the population watch television regularly as per statistics of Doordarshan and other researchers (Saxena, 2005). Television is the product information source for 47% of Indians which is highest compared to other media's. Public TV channel like Doordarshan reaches 90% country's population covering all geographical locations and demographic characteristics. Rs.600 crores advertising revenue is from TV. Most of the companies are spending more than 40% of their advertising budget on TV advertising.

TELEVISION ADVERTISEMENT INFLUENCE ON CHILDREN

Children spend more time in watching TV than any other media. Children are influenced by many factors before their purchase decision on ice creams, chocolates, toys, etc. Children watch television on weekdays and weekends, ranging from 15 minutes to two hours on weekdays and during weekends more television is watched by children (Margarat – Anne Cowler, 2003). They also have a substantial influence on their parent's purchasing decisions (Hawkins et.al, 2001). Children are considered as influencer in family's purchase decision (PavleenKaur- Ragbir Singh, 2006). Considering certain products, children are instrumental in initiating a purchase and for a few; they make the final selection themselves. John (1999) viewed socialization of children in three different levels like perception level (3-7 years), analytical level (7-11 years) and reflective level (11-16 years). Advertising stimulates materialistic values in children because it arouses desires for services

or products (Pollay, 1986). Children's desire to purchase and parental denial of these causes parent-child conflict (Robertson, 1979). Advertisements create happiness to children but there are chances of unhappiness as well. Advertisements create unrealistic expectations regarding quality and the performance of products. Children become unhappy, dissatisfied and frustrated when the purchased product doesn't meet their expectation. (Atkin, 1980). Kotwal et al., (2008) analysed the effect of media on lifestyle of adolescents in the age group (12-18 years) and found that television channels certainly affected the lifestyle of individuals. Children's attitude towards demand for advertised product is heavily influenced by TV advertisements (Priya et al., 2009).

TELEVISION ADVERTISEMENTS INFLUENCE ON TEENAGERS

The advertising industry views teenagers as their target segment. The media understands young and teen underdeveloped brains in society as a viable market segment. Kids and adolescents are increasing their purchasing habit and spending more time to purchase their needed product or service. Some of the research companies suggest teenagers are major target customers for the marketing companies to aim at because they influence a large family purchase decision (saeed-almahairi, 2013). Adolescents acquire primary consumer behaviour from parents and media contacts become the secondary source of information for them (Brand and Greenberg, 1994). Over 40,000 TV advertisements per year are viewed by young teenagers (Paediatrics, 2011).

Television viewing by teenagers will give them information about different products, services, stores, shopping malls and brands as well as how those will fit in certain lifestyle of individuals (Moschis, 1978). There is a direct influence of TV advertisements on teens. They are more attracted towards television commercials on products like cosmetics, deodorants, shampoos, electronic gadgets, sports items, soft drinks, apparels, jewellery, chocolates, food products, movies, etc., (Kotwal et al., 2008).

TV ADVERTISEMENTS INFLUENCE ON ADULTS

Indian families' consider television sets as a permanent fixture at home. So across urban and rural Indian community, watching TV is in the DNA of people. Considering world's average daily TV viewing is 3 hours and 14 minutes, considering Asia Pacific average of 2 hours and 30 minutes declined by 44 minutes but not so in India. TV viewers are increasing every day, so does the number of channels. Indians watch on an average of 3 hours 16 minutes on a daily basis (Livemint, 2016). During this time TV advertisements are accepted by them. More than the men, it's the women who spend more time watching TV. They mark up to 2/3rd of the adult viewing audience on weekday afternoons, most advertisements purchase time carefully for their commercials during programmes watched by the target audience, they consider most likely to buy (Kavitha, 2006). Adults are more influenced by food and non-alcoholic beverage advertisements which make them spend about 34% of their total spending. (Hindustan Times, Vignesh, Radhakrishnan, 2015). TV has the capability of providing valuable information for the youngsters when it is used constructively and with awareness (Dr. Sukhmoni, 2011). However, considering television programs that include violence raises adult's level of aggression and advertisements shape purchase behaviour through adults and teens. Violence on TV might increase relational, social, direct and indirect aggression in both men and women. In positive note male and female adolescents are more influenced with TV ads and which alters buying habits.

TV ADVERTISEMENTS AS A SOURCE OF INFORMATION

Purchase psyche is based on information received, gathered and stored by customers. Information of products or services plays a vital role in purchase decision. Every company aims at creating larger demand for the products or services which reflect in sales. Flow information from company to customer needs effective media form. TV is a major viewing media. India has 167 million households with TV sets of which over 161 million of which 161 million have access to satellite TV or cable TV which also includes 84 million households which are DTH subscribers (Tam annual universe, 2015). TV is a powerful medium that affects through its contact called 'infotainment'. TV attributes to the behaviour, attitude and life style of people. TV advertisement is aimed at providing positive information to gain commercial benefits in an attractive, stylish and redefined way. To demonstrate a product or service in an attractive manner, TV advertisement is the best medium. It is often said that a picture says a thousand words. TV advertisements use pictures, jingles and voices of the varied characters that are related to the product content which saves in the minds of viewers. TV advertisements end short because of expensive cost on airing them so it fails to provide detailed information about the product or service however, in less taken time vital features or uses of the product or services are shown that create an idea of buying decision in viewer's mind. TV advertising is an effective medium to attract people and influence their attitude positively towards a product. People rely more on TV advertisements rather than any other sources like friends, family and reference group opinions regarding products or services (Malik and Bashir, 2009). TV viewers get accessible information and take decisions regarding products or service purchase (Niazi, et al., 2012).

USE OF CELEBRITIES IN ADVERTISEMENT

Recent times, competition between many products and brands in the market place is becoming more intense. Producing quality products alone is not sufficient in high standard markets to compete, the change in the consumer's life style, consumption pattern, trends and other related factors are making brand owners to concentrate more on persuasive ways of promoting their products and services. Popular choice in the TV advertising industry is celebrity endorsement. One of the leading advertising techniques companies use to create favourable responses and awareness of their product is celebrity endorsement (Tejumaie, 2015). Every company wants its products or services to be remembered instantly when customers have needs of products or service to satisfy effectively. In today's competitive market, survival is becoming tough not because of low satisfied customers, it's because of market changing techniques used in TV ads by competitors. Leading manufacturers use celebrities to endorse to influence consumers brand choice and buying behaviour. Opinion given by (Naresh. K. Mathora 1996:744) – many advertisers feel that TV advertisements are more effective through celebrities in advertisement. This probably indicates why manufacturers of products or services use different celebrities in TV commercials. Choice of celebrity is commonly done considering different parameters like looks, popularity, success, appearance or even just a fantasy figure to endorse a brand, product or service (Solomon, 2002). A celebrity is a known personality who enjoys public recognition by a certain group of people and also enjoys high degree of public awareness. Celebrity appears on TV ads as a spokesperson on behalf of advertising brand or product or service for the ordinary users of the product or service for the ordinary users of the brand or product or service (Schlecht, 2003). There is a huge potential influence on consumers through celebrity endorsement, they have an ability to communicate with mass audience and compare to other endorser type. Celebrity creates positive feelings and increases awareness towards brands and perceived by consumers as more entertaining (Solomon, 2002).

Various marketing and social psychology researchers have studied extensively about influence of celebrity endorsements on consumer purchase decision. Some of the experiments suggest that celebrity endorsement has capacity to enhance recall and use of the products (Horstman and Clark, 2003). Celebrities in TV ads are viewed as dynamic with attractive that also results in influence on consumer purchase psyche (Atkin et al., 1983). Different researchers identified major factors seems to be associated with degree to which celebrity advertising is effective and influential in consumer purchase decision i.e., celebrity appearance, trustworthiness and celebrity knowledge.

TABLE 1: TOP 10 CELEBRITIES IN INDIA AND THEIR ENDORSEMENTS (Nandni, 2015)

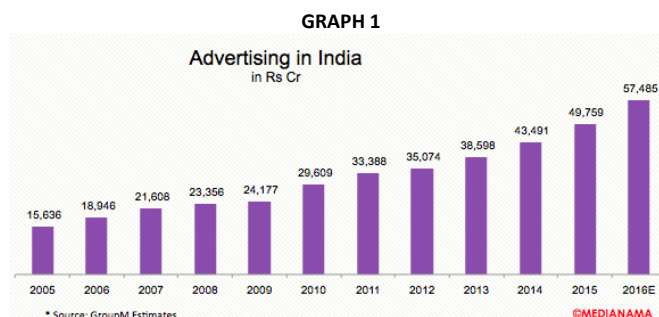
Rank	Celebrity	Brands
1	Aamir Khan	Samsung, tata sky, coca-cola, titan, snapdeal.com etc
2	Shah Rukh Khan	Tag heuer, airtel, emami, Fair and handsome creams, Hyundai, pepsodent, dish tv, etc
3	Salman Khan	Thumps up, revival, yathra.com, relaxo, wheel, Suzuki etc
4	Amitabh bachchan	Parker, dabur, icici bank, kalyan jewellery, boro plus etc
5	Akshaykumar	Eveready, Honda, rasna, micromax, dollar club etc
6	Ranbirkapoor	Panasonic, leveno, Nissan, john players, tatadocomo, pepsietc
7	Deepikapodukone	Axis bank, coca-cola, vanheusen, tissot, kellogg's, garnier etc
8	Kareenakapoor khan	Lux, head & shoulders, lakme, sony etc
9	Katrina kaif	Panasonic, lux, slice, veet etc
10	Aishwaryaraibachchan	L'oreal, prestige, Longines, Philips etc

TV ADS AND CONSUMER ATTITUDE

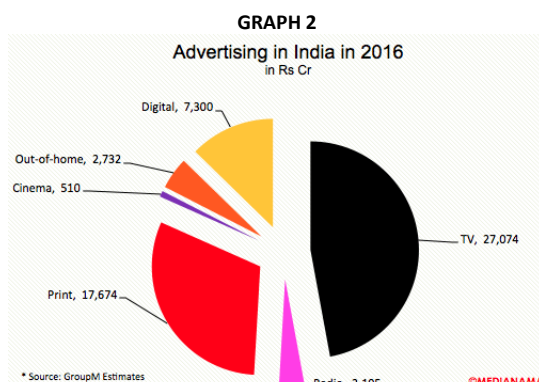
There are two streams of advertising research like experimental studies or econometric studies. Cognitive effects or intentions are influenced by advertising cues, impact of advertising intensity on purchase behaviour are explained in these kind of research (sukhmani&mohit gupta, 2016). Advertising not only increases awareness but also increase the consumption desires and aspiration (schor, 1998). Consumer attitude towards TV commercials are influenced by celebrity, brand preference, commercial repetition, commercial length and knowledge about the product. TV commercials have a pivotal role in changing life style of consumers. The TV ads are easily ignored or are perceived with little value. Information, credibility, entertainment or irritation are the factors to be concerned and considered about consumer's attitude by marketer (Risookchoi, D'Eredita, 2002). Consumer attitude formation on TV ads are influenced by music, lyrics, jingles, humour, cartoon, animation, celebrity, length of commercials will have strong consumer attitude formation which impacts purchase decision (A Razzaque, 2009). In addition to all the studied factors influencing purchase decision on consumers there are psychological factors, peer group and family members and even gender influences the purchase behaviour. According to some of the psychologist's women get easily influenced by TV ads as they are more emotional than men and hence react to advertisements emotionally. The positive impacts of TV ads range from creative awareness about the different norms of the society and gender roles.

SPENDING ON ADVERTISEMENTS

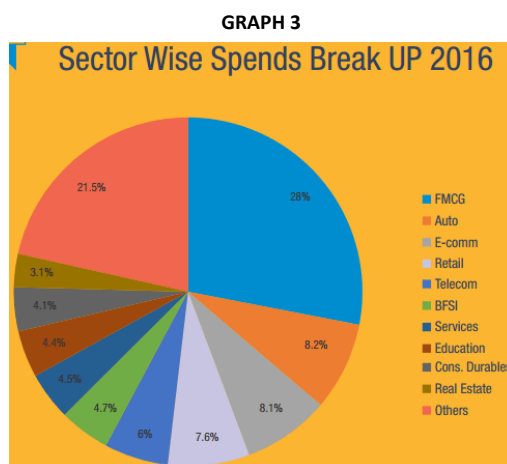
Spending on advertisements by companies is increasing every year. The graph 1 shows how much money is spent in India year on year. (www.madianama.com, groupM. 2016)



In India Television advertisement is the prime media of advertising. Product advertising companies spend more money on Television advertising. It has more the half of the spending in media advertising. Graph 2 shows spends breakup from the total. (www.madianama.com, groupM. 2016)



FMCG products are seen more in advertisements and followed by automobiles sectors and the rest of the sectors. Graph 3 depicts the statistics of sector wise spending. (groupM. 2016)



CONCLUSION

This study provides that there is a direct influence of Television Advertisements on all sections of society includes children, young generation even on parents, adolescent in their buying habits and purchase psyche. Mass media has a vital role in consumer attitude formation and Television as highest of it. This study reveals that adults psyche strongly get influenced by TV ads in their buying behaviour. However use of celebrity in advertisements has its own impact on consumers psyche because they don't forget the advertisement in the short run and these influences their purchase decision. Finally it can be concluded with a purchase decision of consumer is done on three category basis-THINK (awareness and knowledge), FEEL (liking and preference) and DO (conviction and purchase). However there are other variables which influence buying behaviour of consumers. Thus, it is recommended further research can be done on any variables which will have direct influence on consumer purchase psyche.

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KEY ACTIVITIES IN MANAGING SOFTWARE PROJECT EFFORT

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ABSTRACT

Accurate effort estimation is a crucial task for software business progression: for customers, acquiring software products or making project contracts for software implementation, accurate effort estimation enables adherence to schedule and budget without delay in deployment and introduction (Conte, et al., 1986; Sommerville, 2001). A software supplier organization strives to estimate the effort needed in building software as accurately as possible to ensure the project's budget and schedule, and the success of resource allocation. Despite the numerous effort estimation approaches and applications available, the estimates have remained inaccurate. The objective of this paper is to find out the management practices of software development project effort, resulting in increased effort estimate accuracy. In the quest of its goal, the paper commences by presenting the theoretical background and the key concepts related to software project effort management approach. This paper focuses on an activity set of general software project activities, which are found to be one of the major software project activity categories besides software construction and project management effort.

KEYWORDS

project management, software development effort management, software engineering, software cost estimation.

1. INTRODUCTION

Software providers require cost, price, and time-to-market calculations which are not possible without knowledge of effort and its distribution. Workload estimation is needed for work and staffing plans. Sufficiently accurate effort estimation is important for software engineers, because successful resource allocation decreases working pressure and haste. Accurate effort estimation is a crucial task for software business progression: for customers, acquiring software products or making project contracts for tailored software implementation, accurate effort estimation enables adherence to schedule and budget without delay in deployment and introduction (Conte, et al., 1986; Sommerville, 2001). The numerous formal models, methods and tools available for estimation have reached accuracy levels which are too low for the software industry companies. In practice, the same level of accuracy can be achieved with the informal expert judgment technique, which has remained as the most commonly employed estimation technique (Jørgensen, 2007). Two factors are emphasized in respect to the difficulty in producing accurate estimates: software sizing and the available data for estimations (Armour, 2002). Moreover, it has been argued that the formal effort estimation models are too complex and uncertain for practical use (Sommerville, 2001). The applications of these models are usually not transparent, i.e., the factor weights used for effort derivation are not obtainable in order to validate them. Transparency would be required by the estimator to evaluate the reasonability of the gained estimate, i.e., what comprises the effort and the costs.

An important, yet overlooked, factor explaining poor estimates is the light consideration on different activities involved with the project. The estimators employing the expert judgment technique frequently consider only those activities that they are in relation with in a software project and focus on the effort of actual software construction (Jørgensen, 2004b, 2005; Jørgensen and Sjøberg, 2004). Moreover, the focus in effort estimation research and estimation applications has been on software construction (i.e., analysis, design, implementation and testing) and project management (Boehm, et al., 2000; MacDonell and Shepperd, 2003), whilst neglecting other software project activities.

2. LITERATURE REVIEW

The theoretical background for the key activities related in managing effort in a software project is introduced in this section.

2.1 EFFORT AND COST ESTIMATION

The *effort* of a software development project can be generally defined as the time consumed by the project, and it can be expressed as a number of person hours, days, months or years, depending on the size of the project (Chatters, et al., 1999). Brooks (1975) has defined effort as the product of people and time, i.e., $\text{effort} = \text{people} * \text{time}$. Effort is estimated in most projects, especially in projects employing traditional project management methods, to derive the project costs that are needed to justify the business case. In agile software development, the project costs are derived from the estimated software size (Cohn, 2008). An *estimate* is a probabilistic assessment with a reasonable accurate value of the centre of a range. Formally, an estimate is defined as the median of the (unknown) distribution (Fenton and Pfleeger, 1997). An estimate is a prediction; hence, an estimation model can be considered as a prediction system. *Effort estimation* is often used as a synonym for cost estimation but, to be precise, *cost estimation* is derived from the effort estimate by valuing the effort using the cost of project personnel and some other major project costs. Thus the outcome of effort estimation is a time value, whereas the cost estimate outcome is some monetary value (Conte, et al., 1986; Fenton and Pfleeger, 1997; Sommerville, 2001).

2.2 EFFORT DISTRIBUTION

Although effort can be distributed in a project between project activities or project phases in many different ways, *effort distribution* is a less-investigated effort estimation area. Indeed, it has been disputed whether it is useful to distribute effort in the first place (Blackburn, et al., 1996; MacDonell and Shepperd, 2003). Yet examples exist in the software engineering literature; Brooks' (1975) suggestion for rule-of-thumb effort distribution for software construction among the first in the mid-1970s. Effort distribution can also be used to compare different projects with each other (Heijstek and Chaudron, 2008).

2.3 WORK BREAKDOWN STRUCTURE (WBS)

Effort is distributed on software project activities and sets of activities that form a *work breakdown structure*, WBS. A WBS is a particular defined tree-structure hierarchy of elements that decomposes the project into discrete work tasks (Royce, 1998; Wilson and Sifer, 1988). It can be very useful to organize project activity elements into a hierarchical structure for project budgetary planning and control purposes (Boehm, 1981). An early establishment of a WBS helps to divide the effort into distinct work segments that can be scheduled and prioritized (Agarwal, et al., 2001).

WBS is also required by the currently employed capability maturity models. For example, the staged representation of CMMI (SEI, 2006; SEI, 2010) requires WBS on its maturity level 2. However, no standardized way to create a WBS exists, and the software engineering literature provides only a few general WBS including

ones applied with the two COCOMO models (Boehm, 1981; Boehm, et al., 2000), the *Rational Unified Process* (RUP) activity distribution (Royce, 1998), and the ISO/IEC 12207 work breakdown structure for software lifecycle processes (ISO, 1995). It is noted that although the concept and practice of using a WBS is well established, the topic is largely avoided in the published literature because the development of a WBS depends on the project management style, organizational culture, customer preference, financial constraints, and several other project-specific parameters (Royce, 1998).

Another structure for work breakdown is provided in the OPEN process Framework (Henderson-Sellers, 2003), which in one of the five major framework components is Work Units, which results as a Work Product. A *Work unit* is defined as a functionally cohesive operation performed by a Producer (people). The three major classes of Work Unit are Activity (e.g., 'project planning' or 'modeling and implementation'), Task (e.g., 'code' or 'evaluate quality'), and Technique (e.g., 'class naming 'prototyping' or 'unit testing'). These classes form pairs and are linked with each other, e.g., Activities are linked with Tasks, and Tasks with Techniques.

2.4 EFFORT MANAGEMENT

The concept of effort management is rarely used in software engineering or information system research. The concept was introduced in information system research first in 1995. Young (1995, p. 716) defines *effort management* as a management area that "tracks the commitment of resources against undertakings, both project and non-project". In fact, Young (1995) emphasizes the non-project consideration over project. We, on the other hand, implicitly limit our consideration to software projects, and define effort management as an organized process to estimate, collect, monitor and control, and analyse effort related to software projects and their activities.

Effort management can be considered to include all necessary functions which manage effort in a software project. These functions include effort estimation, effort collection, and effort assessment and analysis, for instance. Simplified, during project planning, effort is initially estimated with the method in use. The estimate is revised during project execution with both collected and assessed effort data from the project. During project closure, the delivered project and its effort are analysed, and a project final report is drawn. To assist effort management, some frameworks have been proposed: *Software Development Management* (SDM) framework (Tsoi, 1999), and the frameworks proposed in (Fairley, 1992; Vesterinen, 1998). These frameworks are fairly limited, both in terms of project lifecycle phases and effort functions. For example, the SDM framework is limited mostly to the pre- project and project phases. The proposed frameworks also concentrate mostly on the effort estimation function.

2.5 EFFORT ESTIMATIONS AND RE-ESTIMATIONS

The effort of a software project can be estimated and modelled, and estimation techniques can be classified in several ways. In the following, we present the evolution from the first effort and cost estimation approach classifications by Boehm (1981) and Conte, et al., (1986) to the later classifications by Fairley (1992), Fenton and Pfleeger (1997) and Briand, et al., (1999, 2000).

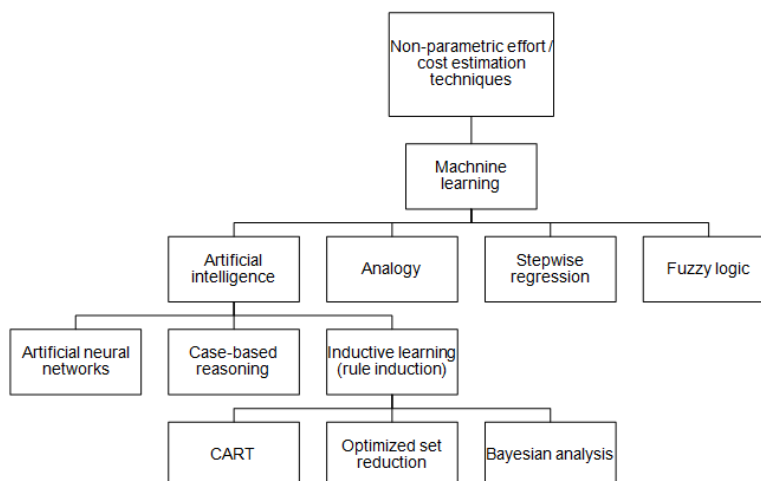
Boehm (1981) divided the methods into seven categories: algorithmic models, expert judgment, analogy, Parkinson, price- to-win, top-down, and bottom-up. The algorithmic models include linear models, multiplication models, analytic models, tabular models, and composite models. Later, this division was reduced to two main antithetic approaches: algorithmic and non-algorithmic approaches. Conte, et al., (1986) divided the approaches of effort estimation on the highest level into micro-model and macro-models of effort. The macro-models of effort were divided further into historical-experimental models, statistically-based models, theoretically-based models, and composite models. The historical-experimental models include expert judgment technique. The statistically-based models include techniques such as regression analysis, linear models, and non-linear models.

In 1992, Fairley (1992) addressed the different estimation techniques which included the traditional approaches (categorized into empirical techniques, regression techniques, and theory-based techniques) and the advances in the popular approaches at that time (advances in analogy-based estimation, function point techniques, regression modelling, theory-based models, and in size estimation). Fairley (1992) predicted that analogy-based methods with expert system decision rules will emerge into future estimations.

Fenton and Pfleeger's (1997) division was based much on Boehm's division, but included only four categories: expert opinion, analogy, decomposition, and models. Each of these techniques can be applied either bottom-up or top-down.

Briand, et al., (1999, 2000) divided the effort estimation techniques into parametric and more advanced non-parametric modelling techniques (Figure 1). The non-parametric modelling techniques have emerged gradually into effort estimation, but applications are still in short supply.

FIGURE 1: THE NON-PARAMETRIC EFFORT ESTIMATION TECHNIQUE CLASSIFICATION (adopted from Briand, et al., 1999, 2000)



Since the beginning of the 1990's research on effort estimation has increased and new approaches have been proposed and presented. These approaches include various machine learning techniques and artificial intelligence. Based on the evaluations of these advanced techniques (e.g., (Finnie and Wittig, 1996; Mukhopadhyay and Kekre, 1992; Shepperd and Schofield, 1997; Srinivasan and Fisher, 1995)), one cannot conclude a superior estimation technique, although case-based reasoning seems to be a promising one out of the advanced formal approaches. The results of the evaluations depend on the case and are partially in conflict with each other. Although new approaches have been introduced, in practice the methods employed are mostly old approaches. A reason for this is that the new approaches, such as artificial neural networks, produce results hard to interpret in practice (Briand, et al., 1999).

In fact, formal techniques in general are seldom employed in the software engineering industry. Studies (Gray, et al., 1999; Hihn and Habib-agahi, 1991; Jørgensen, 2005; Jørgensen and Sjøberg, 2004; Kitchenham, et al., 2002; Virtanen, 2003) imply that applied techniques in the software industry are primarily informal, and based on analogy and expert analysis, particularly since there is no conclusive evidence that a formal method outperforms the informal expert analysis (Jørgensen, 2004a, 2004b, 2007; Kitchenham, et al., 2009). The analysis of fifteen studies comparing the accuracy of expert estimates with model estimates reported that findings were distributed equally, i.e., five studies were in favour of expert estimations, five studies found no difference and five studies were in favour of formal model-based estimation (Jørgensen, 2004b).

In another study (Niessink and van Vliet, 1997), the expert judgment technique has been reported to outperform the Function Point Analysis based estimations in the context of predicting maintenance effort. *Expert judgment estimation* is defined as an “estimation conducted by a person who is recognized as an expert on the task and who follows a process that is, to some degree, non-explicit and non-recoverable” (Jørgensen and Sjøberg, 2004, p. 317). Reasons for applying expert judgment instead of formal estimation methods include flexibility regarding required input for estimations and time spent on estimations.

Software project effort estimation has been increasingly studied since 1960's both in the academia and in the software industry. In particular, the research interest lies within *modelling* effort and cost estimation. As models in general, they describe a phenomenon *ex post*, and thus their use *ex ante* for estimation can be challenging; rather, they can be used for simulating the software project effort after project's completion when the actual effort is in hand. Moreover, the models require information as input parameters which cannot be obtained before the project is completed. For example, COCOMO model (Boehm, 1981) requires the number of lines of code when modelling software project effort.

Effort and cost estimation has existed in software engineering research literature since 1960's when the first models to estimate effort and cost were introduced (Conte, et al., 1986). These pioneering models included linear statistical models such as Nelson and Farr-Zagorsky. The famous formal models are from the turn of the 1970-80's, and include the Putnam SLIM model, Price-S model, the Jensen model, and the COCOMO model.

According to (Pressman, 2005; Royce, 1998; Smith, et al., 2001), the most widely known models include the COCOMO (Constructive Cost Model) (Boehm, 1981) and COCOMO II (Boehm, et al., 1995, 2000) models, which are primarily based on software size in lines of code, and the *Function point* (FP) count (Albrecht and Gaffney, 1983). The FP count, or *Function Point Analysis* (FPA), is based on the software functionality, and can be used to derive effort with a known productivity factor, and has many variants such as Mark II FP (Symons, 1988).

Boehm (1981) introduced the original COCOMO model in 1981. The original *COCOMO model* is a collection of three different models: The Basic model, the Intermediate model, and the Detailed model. The purpose of using a more complex model is to achieve more accurate estimation by taking more factors into account. This in turn requires more details to be known. The Basic model, which can be applied in the early stage of the project, estimates the effort based primarily on the software project's size in terms of program lines of code (*kilo delivered source instructions*, KDSI). The Intermediate and Detailed models use an *Effort Adjustment Factor* (EAF) and slightly different coefficients for the effort equations. The EAF is a product of the six-scaled Effort Multiplier and the corresponding cost driver. The COCOMO cost drivers consists of fifteen independent Product, computer, personnel and project attributes which determine the project's effort. The major difference between the Intermediate and the Detailed model is that Effort Multipliers are in the Detailed model used for each project phase (Agarwal, et al., 2001; Boehm, 1981; Fenton and Pfleeger, 1997). COCOMO was enhanced to *COCOMO II* in the mid-1990's in order to develop the model to address the new needs of evolving software engineering such as distributed software and component techniques (Boehm, et al., 2000; Fenton and Pfleeger, 1997). COCOMO II categorization is not, however, suitable for all project situations, and should be adjusted via context and judgment to fit individual projects (Boehm, et al., 2000). COCOMO II model's equation for counting effort corresponds with the original COCOMO's Intermediate (or Detailed) model's equation. The amount of Effort Multipliers considered depends on the project's development phase as the knowledge on the project grows (Agarwal, et al., 2001). Moreover, besides using only lines of code for the software sizing, object or function points can be used (Fenton and Pfleeger, 1997; Pressman, 2005).

Besides estimating effort and cost, the COCOMO models provide effort distributions over different work breakdown structures. A WBS was suggested for projects employing a waterfall project lifecycle process in (Boehm, 1981). The WBS is applied with the COCOMO cost estimation model as the model estimates how effort is distributed on different activities between eight major categories, namely requirement analysis, product design, programming, test planning, verification and validation, project office functions, configuration management and quality assurance, and manuals, each having specific activities in the four project lifecycle phases. These phases were based on earlier estimation methods and the waterfall lifecycle model (Boehm, 1981).

COCOMO II has been developed to be usable by projects employing either waterfall or spiral software engineering processes. In the waterfall approach of COCOMO II, software activity work was divided into five major categories: management, system engineering, programming, test and evaluation, and data. This breakdown was adapted from the COCOMO's eight categories, which were partly reorganized and renamed. The requirements, product design, and configuration management and quality assurance categories were organized as system engineering sub-activities. 'Verification and validation' was renamed 'test and evaluation', 'manuals' became 'data', and 'project office functions' became 'management' (Boehm, et al., 2000).

The COCOMO II spiral approach is based on the same WBS approach applied in the RUP (Royce, 1998). The RUP default WBS is based on seven main categories, namely management, environment, requirements, design, implementation, assessment, and deployment. Each of these seven categories includes activities relating to four project phases (inception and elaboration of the engineering stage, and construction and transition of the construction stage) (Royce, 1998). The COCOMO II WBS for spiral process is based much on the same seven categories, yet RUP's 'environment' became 'environment and configuration management' in COCOMO II. Also, the activities within the four phases partly differ (Boehm, et al., 2000). Moreover, COCOMO II dropped COCOMO's modern-programming-practices parameter in favour of a more general process-maturity parameter. COCOMO II was also enhanced with several new parameters (Chen, et al., 2005), for example, with the development of reuse, multi-site development, architecture and risk resolution, and team cohesion. Moreover, the organization can add new proprietary parameters reflecting its particular situations.

2.6 EFFORT DATA COLLECTION

The software engineering literature (e.g., Pressman, 2005; Royce, 1998; Sommerville, 2001) describes effort-related functions during project execution (collection, monitoring, assessments, and re-estimations) very superficially compared to the effort-related functions during project planning (e.g., effort estimation, scheduling etc.).

However, a few descriptions exist. In the beginning of the 1980s, Boehm (1981) described a follow-up system for projects' effort (cost) information. He pointed out that in the beginning effort estimation is imperfect and actual effort data is needed for calibration and change management. Moreover, not every project fits into the estimating model. Hence, the employed formal effort estimation model requires a particular follow-up system. This system both supports effective project management and benefits the long-range effort estimation capabilities. The data collected in a consistent manner via control activities over several projects can be analysed to determine how the actual effort distribution differs from the estimates. The differences are fed back to calibrate the model. For a new project, data collection should be considered to calibrate their estimating models (Boehm, 1981).

The importance of the effort-related functions during project execution, such as effort collection, was raised also in (Tsoi, 1999), where a framework for software project development management was proposed. This framework concentrated on the pre-project and project phases (referred as acquisition and operation phases, respectively), and especially on the monitoring the effort in a software project. The framework relied on two basic principles which occur in software projects: the existence of change due to the dynamic environment, and the need for dynamic, continuous measurement on project progress to collect real-time information.

2.7 EFFORT ASSESSMENTS AND POST-MORTEM ANALYSES

The projects are assessed after a specific time period, e.g., project phase, iteration, increment, or sprint, and the project is analysed in detail after it has been completed. This retrospective analysis is called an *assessment* or *post-mortem analysis*, a *project closure* or *retrospective*, or a *post-project analysis* (Brady and DeMarco, 1994; Collier, et al., 1996; Haapio and Eerola, 2006; Jalote, 2000). The motivation of the analysis is to consider the finished project or its phase and its results carefully in order to understand and explain it. The teams and organizations want to learn from experience and collect information for future utilization, to improve software processes, and to facilitate product development based on learning. One of the goals of such assessment is to decrease the future effort estimation inaccuracies.

Effort assessments and post-mortem analyses are carried out as a part of SPI. Analysed effort information is required by the maturity models, e.g., ISO/IEC 15504 (ISO, 1993) or CMMI (SEI, 2006; SEI, 2010) as evidence of process maturity. Effort is assessed regardless of the software development model, not only in waterfall-based projects but also the spiral, incremental, iterative, and agile approaches, such as widely employed RUP (Royce, 1998) or Scrum (Schwaber, 1995; Takeuchi and Nonaka, 1986).

The effort assessment takes a retrospective into the success of effort estimation while retrospective analyses are performed to get exact data from actual effort and project results in terms of requirements fulfilment of the stakeholders. A requirement is defined as “something that the product must do or a quality that the

product must have" (Pobertson and Pobertson, 1999, p. 5). The software product holds both functional and non-functional requirements (Pobertson and Pobertson, 1999), and on the other hand, both user and system requirements (Pressman, 2005). The functionality of the product, i.e., things that the product must do, and the data manipulated by the functions, is stated as the functional requirements. The non-functional requirements, on the other hand, are the product's qualities, i.e., the requirements for look and feel, usability, performance, operational, maintainability and portability, security, cultural and political, and legal (Pobertson and Pobertson, 1999). The user requirements are statements of "what services the system is expected to provide and the constraints under which it must operate" whereas the "system requirements set out the system services and constraints in detail" (Sommerville, 2001, p. 118).

The rationale for performing assessments and post-mortem analyses is well-represented in the literature as an essential part of software engineering process and organization's knowledge management (Pus and Lindvall, 2002), and highly endorsed by both IT consultants (Lacovou and Dexter, 2005) and scholars. To put it simply, the analysis can increase the odds of project success (Verner and Evanco, 2005) and improve project cost estimation (Birk, et al., 2002). Despite the benefits, the minority of the organizations employ assessments consistently (29% according to (Verner and Evanco, 2005)). The proposed analysis processes may require rather large resources (both time and personnel) which, in practice, are quite limited in the software industry. Moreover, in many cases the analysis descriptions provide only general guidelines without detailed methods. As the general software engineering literature (e.g., (Sommerville, 2001)) attempts to cover the whole spectrum of software engineering, it provides understandably only rough descriptions of assessments and post-mortem analyses. In 1990s, the interest in post-mortem analysis increased in particular (Brady and DeMarco, 1994), moving from analysing the developed system (Kumar, 1990) to analysing the process how the systems were developed (Collier, et al., 1996), and from closing the project to improve the software engineering process.

Conducting post-mortem analyses have also been criticized. Post-mortem analyses, by nature, take a reactive approach, i.e., analyse a project after it failed, while proactive actions would be more advantageous in preventing the project from failing (Awazu, et al., 2004). Assessing effort during the project is one of these steps; it enables necessary, even drastic, measures be taken before the project is completed. It is also reminded that documented and recorded information does not improve anything unless the knowledge is shared and available, and the tools attract to utilize the information (Lyytinen and Pobey, 1999; Petter, et al., 2007).

3. RESEARCH METHODOLOGY

Several different research strategies have been proposed for the software engineering and information systems research. These research methodologies can be found very useful, but no-one is sufficient by itself to form a well-grounded research program. In fact, Nunamaker, Chen and Purdin (1991, pp. 95-96) state: "where multiple methodologies are applicable, they appear to be complementary, providing valuable feedback to one another." This study uses qualitative information in order to prepare an explanatory theoretical paper to study the key functions in managing software project effort. The paper reviews literature to describe, analyse and understand the software project effort activities.

4. DISCUSSION & CONCLUSION

Software engineering literature (Pressman, 2005; Royce, 1998; Sommerville, 2001) focuses on project management and effort concepts, but the emphasis is on effort estimation and effort-related planning (e.g., scheduling) rather than on the total management of effort. Effort has not been seen as an independent area of management like risk or quality. Literature discusses risk management, quality management and configuration management individually but effort is covered as a part of software project management. In other words, research has particularly focused on improving effort estimation, and has concentrated on the software construction effort of the software projects.

Several effort and cost estimation models and methods have been proposed during the last decades. Despite the numerous applications available for estimation, effort is, however, frequently underestimated (Gruschke and Jørgensen, 2008; Kitchenham, et al., 2009). According to studies (Briand, et al., 1999; Shepperd, et al., 1996), the effort estimation methods and tools have reached only low accuracy levels with MPE-values worse than 0.30, whereas the target value between the estimated and actual effort for software industry companies can be three times smaller, for instance. The effort estimation research and the different estimation techniques emphasize two factors in respect to the difficulty in producing accurate estimates: software size and the available data for estimations (Armour, 2002). Most formal effort and cost estimation models and methods require a determination on the size of the software to be produced. The size is generally determined for example in terms of *lines of code* (LOC), *function points* (FP), or *use case points* (UCP). The prediction of the size of the final software product is, however, challenging and complex. Another factor which reflects to inaccurate effort estimates is the shortage of knowledge on the software to be produced since these estimates are made especially in the early stages of the software development process (Armour, 2002; Boehm, 1981).

Although several formal approaches have been proposed for effort estimation they are seldom employed in practice. As mentioned in literature, the applied effort estimation approaches are in most cases informal, and based on analogy and expert analysis. Jørgensen daunts that it might not be possible to develop effort estimation models that replace expert judgment, and therefore the best effort estimation improvement strategy may be to improve the judgment-based effort estimates (Jørgensen, 2005).

An overlooked, possible factor explaining poor effort estimates is the light consideration on different activities involved with the project. Therefore, the likelihood of unintentionally leaving out significant activities affecting the estimation is significant. Also, the focus in effort estimation research and estimation methods has been on software construction and project management (MacDonell and Shepperd, 2003), whilst presenting the other activities related to the project merely as a fixed proportion from the software construction effort, and as effort overhead. These activities, which are not directly related to software construction or project management, include various management and support activities, each carried out by several members of the project.

Experiences from the software industry imply that in effort estimations where expert judgment technique has been applied the estimators consider exclusively those activities that occur for them in a software project and focus on the effort of actual software construction. Indeed, research (e.g., (Jørgensen, 2004b, 2005; Jørgensen and Sjøberg, 2004)) confirms this observation. Also, there is a correlation between years of experience and the variety of different project activities considered for the estimate (Jørgensen and Sjøberg, 2004) more experienced experts consider a larger variety of project activities. Different experts estimate different areas, e.g., programmers estimate the amount of programming effort.

A reason for the effort estimate inaccuracy can be the inadequacy of previous projects' effort data collection when effort is both reported badly and collected without analysing it properly afterward. The collected effort data is used for both improving team performance in upcoming project phases and project and in calibrating the weights that adjust the factors and drivers which are used for the effort estimate derivation in the organization in question.

The proposed processes for post-mortem analysis (Collier, et al., 1996) describe post-mortem of the whole project, and provide general guidelines without a detailed method to analyse effort. Furthermore, the proposed analysis processes require rather large resources (both time and personnel) which, in practice, are quite limited in the software industry.

Thus from the effort-related challenges described above in the sub-chapters and theoretical background section, it can be concluded that *Estimators consider mostly core construction activities, relevant in their work and when estimating and Effort data quality is bad, i.e., it is not reliable, Effort and cost estimates are inaccurate. Also the estimator cannot judge the accurate result.*

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E-SPEAKING AS GOOD PUBLIC SERVICES FOR HUMAN RIGHTS, KINGDOM OF CAMBODIA**OUK TOM****Ph.D. CANDIDATE****COLLEGE OF PUBLIC ADMINISTRATION****HAUZHONG UNIVERSITY OF SCIENCE & TECHNOLOGY
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CHINA****ABSTRACT**

The research paper focuses on e-speaking as good public service for individual communication that was personal/individual expression the individual rights. For example; we were in field survey and interviewed each officer who works for some departments of Secretariat General of the Senate, Cambodia. The Senate of Kingdom of Cambodia is a legislative branch called Upper house parliament of Cambodia so please; we try our best to understand of his/her freedom of speech's perspectives that related to human rights in social relations. The paper wasn't presented to the whole country was a apart of a case study relationship how the officers who works for different departments of Secretariat General of the Senate practiced e-speaking rights to other people who live in different places of Cambodia and we will do more researches to compare to get more resources and data how to measure and understanding development personal rights.

KEYWORDS

kingdom of Cambodia, public services, e-speaking, human rights, communication networks.

INTRODUCTION

My paper wrote on the important E-speaking protections and development rights by using hand phone and others. Hand phone or smart phone is a small part of information communication and technology to share and provide information to each other. Nowadays, smart phone is a very popular ages such as SMS, Facebook, and Line and so on.

E-speaking noted how the risks of e-speaking to express a part of human rights protection preferred to freedom of speech that there was a negative communication networks to express a freedom of speech. The negative e-speaking was a good reference for the research per how to measure it. It was used by illegal rights of human rights protection but it was very difficult to harmful of someone's making decision even though the laws are harmful so e-speaking is an important case for researching such as a key factor of freedom of speech individual usage perspective.

My writing paper was E-speaking as good public services for human rights of Cambodia but it was not representative the whole country (Cambodia). We selected three Departments of Secretariat General of the Senate of Kingdom of Cambodia such as case study. The three Departments are: 1) – Legal Research Department; 2) - human resources department; and 3) - Region and territorial collective department. The article did not focus on the functions of each department, it focused on how E-speaking was used or practiced for public services by the officers or people who are working for each department of Secretariat General of the Senate of Kingdom of Cambodia such as privacy rights and individual rights.

E-speaking is a part of language for communication networks from a person to another person or a person to anywhere such as police station, radio station, and television station through hand phone or smart phone.

E-speaking is very important to promotion e-democracy and it is easy to connection between citizen and citizen and citizen to their leaders to share information, concern about their ideas. Furthermore, how to apply for e-speaking expresses a freedom of speech such as a good public service of human rights in Cambodia.

E-SPEAKING REVIEW

E-speaking bases on a trustable communication between individual and individual; partner and partner conversation. On the other hand, a business person contacted some people who talked about their sale business, for example: tour trip, Real estates and other products through Radio Station, newspaper, magazine, TV and Online express the sources information and address contact such as commercial and advertisement but it depended on everyone or people to make decision to contact to them or not. Furthermore, we saw many banners for sale or hires such as the land, house, cars etc. so please contact us and more detail information was mentioned above.

Commercial e-speaking is a key driver for a personal communication between company and company, person to person to advertise and share information such as sale business and others as legal rights. Commercial e-speaking is more potential for communication and connection in social relations. We noted that commercial e-speaking is available close friends/families to new creation such as trust e-speaking.

Trust e-speaking is your choice or makes decision with available reasons of good relationship according to multiple communication such as resource information to consider to how to be trust each other and protection legal rights of your freedom. To understand e-speaking as good public services for human rights we will continue and refer to our evident observation and data collection to be more details and more discussion result.

PROCESSING RESEARCH

Processing research paper relies on our goal and specific subject how to create questionnaire such as data collection. The paper limited the exactly place, General Secretariat of the Senate, Cambodia. The research paper focused on some Departments of Secretariat General of the Senate of Kingdom of Cambodia. Data collection followed our questionnaires and it is a good review how measure and practiced e-speaking in the public sector especially an important observation of officers who work for different departments of Secretariat General of the Senate is analyzes of the vision.

RESEARCH METHODOLOGY

The Research paper studied on both of negative and positive that based on the survey method and questionnaire of people/officers who have worked for some departments of Secretariat General of the Senate of Kingdom of Cambodia. The data collection was a guide to measure to get information for different results for analyzes of freedom of e-speaking for personal expression such as a part of human rights.

DATA COLLECTION

In order with data collection, the research paper made decision to choose four departments of Secretariat General of the Senate of Kingdom of Cambodia such as legal Research Department, Human Resource Department, Information Department, and Region and Territorial and collectivity Department. Each department has been different functions and among of officers so our field survey chose only four people/officers to complete our questionnaire paper after their completed it, we rechecked it and put in order to SPS software to get the qualitative and quantitative results.

RESULTS

With the regards data collection and our schedule, we spend at least four days/per week to interview director of each department and asked permission from him/her first, secondly, we started to communicate with his/her officers who work for the department as mentioned above to complete the questionnaire paper around 30 minutes and then, we were hopefully to get paper back from them without their names.

2016, 3rd August, as the good opportunity to meet Mr. SOK SOCHEAT, director of Legal Research Department of Secretariat General of the Senate, he told me his department, there are 5 offices, 1- public office, 2- international office, 3- Administrative office, 4- Criminal office, and 5- private office. Totally, there are ...officers who work for Legal Research Department according their tasks and regulations of each office including role of action plans. He allowed me to see his officers such as my field surveys to interview and completed my prepared questionnaires. Most of officers I quoted only 4 people who work in different office as sample one office chose only person to check and complete my questionnaires such as answer Sheet results

2016, 2nd September, Mr. Kea Try, deputy Director, Region and Territorial and collectivity Department and he provided me a good chance to meet his officers who work for in his department. According to my questionnaire needs only six people to complete answer sheet based on his/her making decision which one is better follow up to the questions.

2016, 23rd September afternoon, Mr. NOP KOUCH, Director of Human Resource Management of Secretariat General of the senate of Kingdom of Cambodia permitted me to meet him taking about field survey for his Department and officers who work for Human Resource Management. My fill survey's results such as Figure 1, we asked among of nine people to know the different age of our data collection results and we noted among of their ages, there are more increasing among calculation is 26 to 35 years old. Second is 20 to 25 years old and 36 to 45 is stable but the decrease is among of people is over 46 years old.

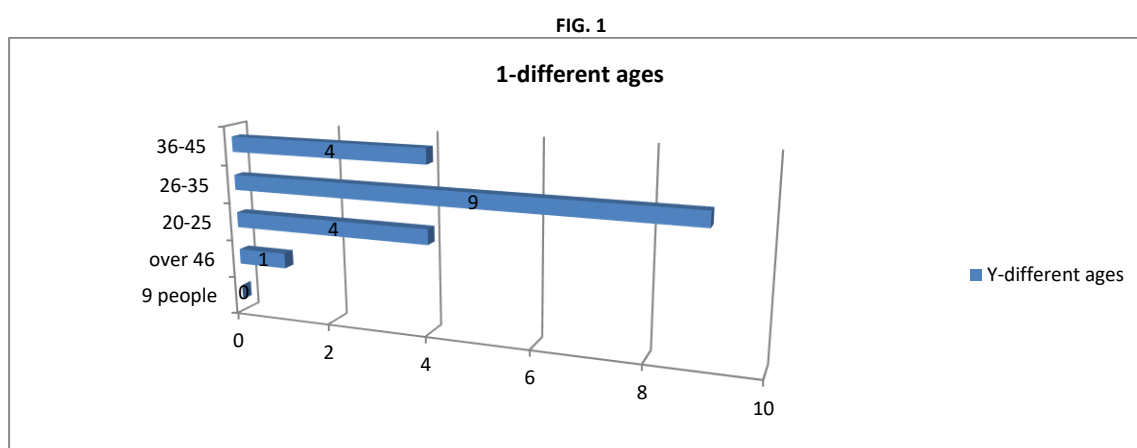


Figure 2 was expressed us people who are more interested are sports and watching TV and the second rank is reading newspaper but listening radio is more decreases.

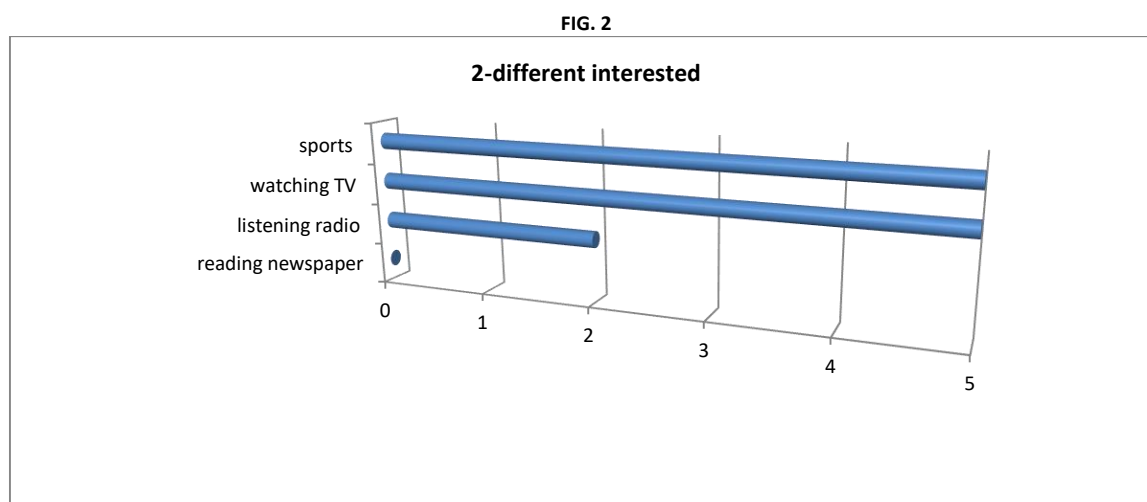


Figure 3 most of people who are using smart phone is for better choice such as good communication and more saving time but there were different conditions and understanding using smart phone is not necessary and waste money.

FIG. 3

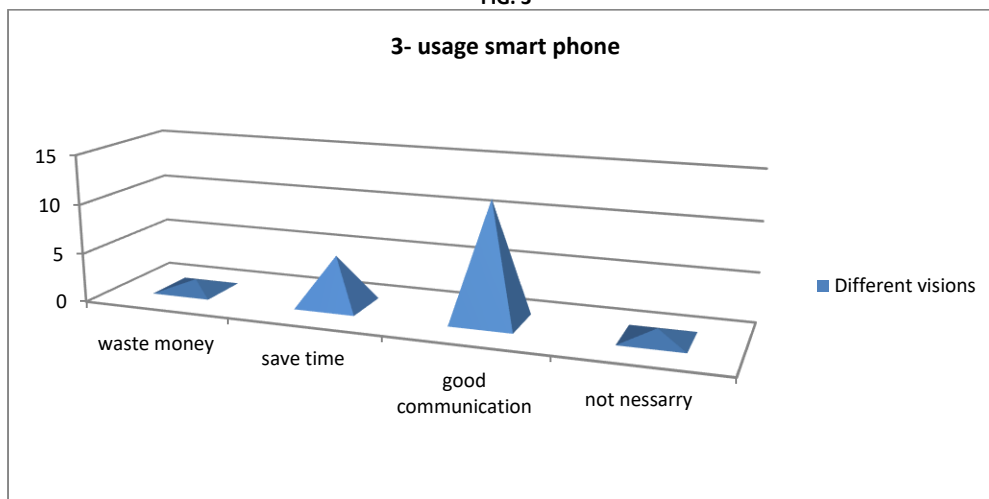


Figure 4 we noted network communication was the first top of using it to share information to each other a part of technology communication in the world.

FIG. 4

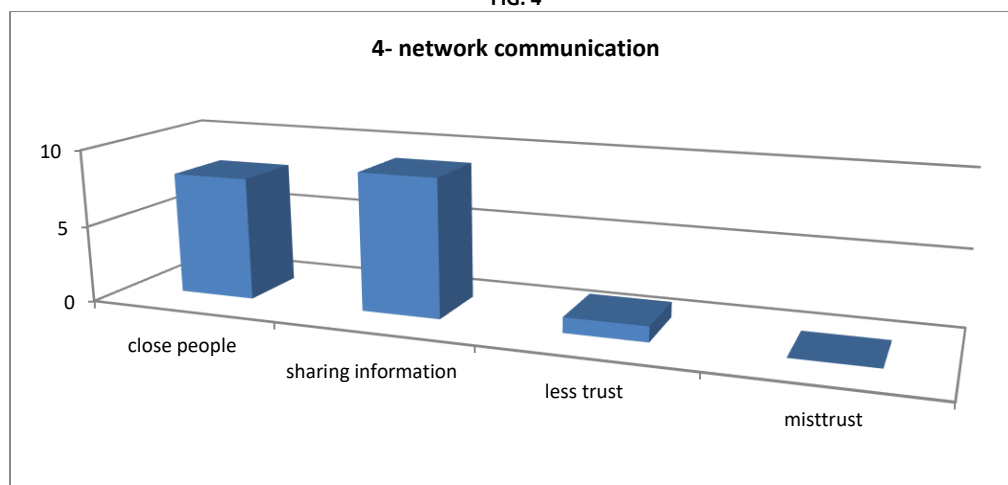
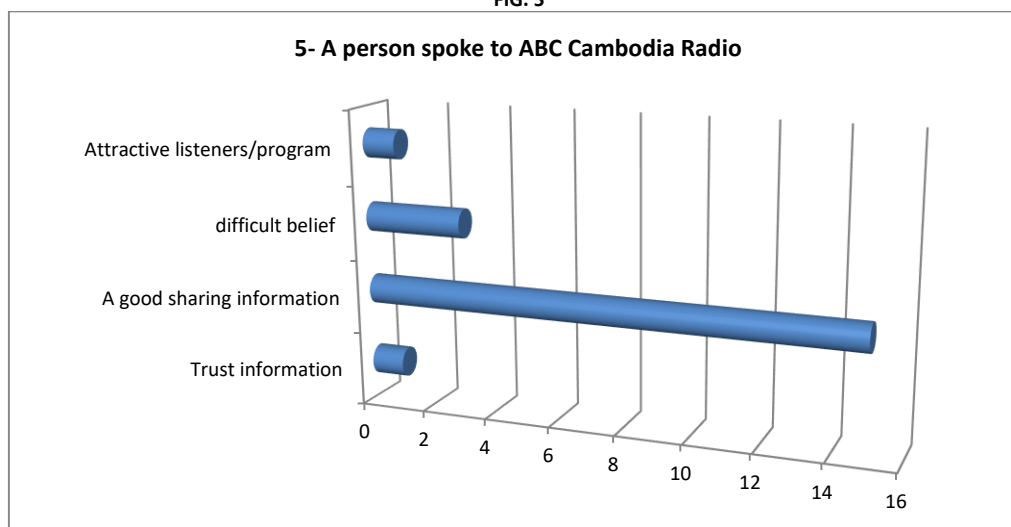


Figure 5 the field survey noted most of people who told us, they understood speaking to ABC Cambodia radio was good sharing information to express an individual freedom of speech in the public but it was a bit difficult belief and there was an attractive program for listeners to consider.

FIG. 5



DISCUSSION

My research paper focused on e-speaking as good public sector for human rights, Cambodia, how e-speaking applies for good public services for human rights? E-speaking focuses on speaking through information communication and Technology expresses on individual rights or privacy rights in advances. There are any discussions of government policies, it is necessary to examine the effect on natural rights for one simple reason; Individuals have rights that government may not violate. In the Declaration of Independence, Thomas Jefferson defined these rights as life, liberty, and the pursuit of happiness buy still many faces to risks of e-speaking in the public sector.

A risk of e-speaking was concerned to speak out of Politic situations relationship to executive Royal Government of Cambodia through private Radio(both local and international radios) for legal public speaking but making decision was not government to pressure on that. Case law of protection human rights, freedom of speech of Cambodia and there was an Article 32: Every Khmer citizen shall have the right to life, personal freedom and security.

Understanding individual rights relationship to e-speaking such as better choice for improving freedom of speech through information communication and technology perspectives were in both public and private sectors of Cambodia. We noted that there saw three levels were separated into normal people, Government officers and politicians who supported political party expressed different their ideas or opinions relationship to human rights of freedom of speech such as public information communication and technology.

Today, every Khmer citizens has the same rights and freedom of speech to apply for e-speaking on networks, Radio, Email, Facebook, We chat, newspaper to make decision such as individual rights to share information, advertisement, sell business, communication, and sharing concerned to Government, representative and to others as legal ways. Cambodia government policies provide more opportunities to Radio, NGOs and newspapers that is better choice for Cambodia people to express or share information such as information communication and technology to create more and good practice of freedom of speech such as public and privacy communication.

CONCLUSION

The results and discussion as mentioned above were exploring our search paper related to E-speaking as good public services for human rights. There are a lot of people who speak to ABC Cambodia Radio, Voice of America (VOA) and Radio Free Asia (RFA) taking about social relations according to each Radio Stations' schedule/programs. Furthermore, we noted normal person/people, farmers who live in rural areas and were born in poor and rich family had more opportunities to speak through Radio Stations to share about their statement problems such as land conflict, traffics jams, jobless was a report to the government to rethink and solve the problems but we saw not too much time or opportunities for people to speak or share their ideas in the forums in the public sectors because of each forums were limited amount of people to participated.

We are not sure all the problems of local people were provided and solved by Royal Government of Cambodia (RGC) but all their spoken/e-speaking through Radio Stations are good information to express about their rights and sharing information to public sector in good advances.

E-speaking through Radio Stations is a very good choice and provides more opportunities to local people or remote areas to make a phone call and sharing information. Good practice e-speaking networks or communication networks are a good policy for providing better public service perspectives for improvable human rights of freedom of speech in the public and private sectors.

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REVIEW ARTICLE ON MODERN PORTFOLIO THEORY: MARKOWITZ MODEL

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ABSTRACT

Noted economist, Harry Markowitz ("Markowitz") received a Nobel Prize for his pioneering theoretical contributions to financial economics and corporate finance. His innovative work established the underpinnings for Modern Portfolio Theory—an investment framework for the selection and construction of investment portfolios based on the maximization of expected portfolio returns and simultaneous minimization of investment risk. This paper reviews portfolio selection model by Markowitz and provides perspective on some open issues. It starts with a review of the classic Markowitz mean-variance framework. It then presents the portfolio choice approach developed by various authors. Martingale methods and resulting portfolio formulas are also reviewed. Their usefulness for economic insights and numerical implementations is illustrated. Areas of future research are outlined based on the Review article. For the long period of time Portfolio theory has been an area of interest of many economists.

KEYWORDS

financial economics, modern portfolio theory, portfolio construction, minimization of investment risk, risk return analysis, optimum portfolio, market indexes.

INTRODUCTION-Modern portfolio theory – Markowitz

Markowitz (1952) has developed this theory that is popularly known as the theory of investment or portfolio theory. The concept of diversification was mathematically developed by him. He used mathematical programming and statistical analysis in order to arrange for the optimum allocation of assets within portfolio. He developed the optimal rule for allocating the available amount in different securities.

In his theory Markowitz assists in the selection of the most efficient portfolio by analyzing various possible portfolios of the given securities. This model shows investors how to reduce their risk. This model is based on expected returns (mean) and the standard deviation (variance) of the various portfolios. The optimal portfolios were used in 1952 by Harry Markowitz, and it shows us that it is possible for different portfolios to have varying levels of risk and return. Portfolio theory deals with the value and risk of portfolios rather than individual securities. It was proved by Markowitz that investor invest in different securities it is possible to reduce risk. The classical mean-variance approach for which Harry Markowitz received the 1990 Nobel Prize in Economics offered the first systematic treatment of a dilemma that each investor faces.

The conflicting objectives of high profit versus low risk. In dealing with this fundamental issue Markowitz came up with a parametric optimization model that was both sufficiently general for a significant range of practical situations and simple enough for theoretical analysis and numerical solution. As the Swedish Academy of Sciences put it [154], "his primary contribution consisted of developing a rigorously formulated, operational theory for portfolio selection under uncertainty."

PORTFOLIO SELECTION

Markowitz, H. (1952). *Journal of Finance*, 7(1), 77–90.

Harry Markowitz is generally acknowledged as the father of modern portfolio theory after publishing his seminal paper in 1952, for which he (jointly) received a Nobel Prize in 1990. Markowitz (1952) and Tobin (1958) showed that it was possible to identify the composition of an optimal portfolio of risky securities, given forecasts of future returns and an appropriate covariance matrix of share returns. Markowitz introduced the idea of risk aversion of average investors and stated that they wanted to maximize the expected return with a minimum amount of risk. This model provides a theoretical framework for analyzing risk and return. In relation to this William F. Sharpe's has described the advantages of using an Asset Class Factor Model for practical applications of the Markowitz portfolio analysis technique.

Markowitz Revisited: Mean-Variance Models in Financial Portfolio Analysis

Marc C. Steinbach *SIAM REVIEW* c. 2001 *Society for Industrial and Applied Mathematics* Vol. 43, No. 1, pp. 31–85

Mean-variance portfolio analysis provided the first quantitative treatment of the tradeoff between profit and risk. The Author describes in detail the interplay between objective and constraints in a number of single-period variants, including semi variance models. Particular emphasis is laid on in this article is to avoiding the penalization of over performance. The results are then used as building blocks in the development and theoretical analysis of multi period models based on scenario trees. A key property which Author shows is the possibility of removing surplus money in future decisions, yielding approximate downside risk minimization.

Lifetime Portfolio Selection Under Uncertainty: The Continuous-Time Case

Robert C. Merton, *the Review of Economics and Statistics*, Vol. 51, No. 3 (Aug., 1969), pp. 247-257

Introduction OST models of portfolio selection have been one-period models. Author examines the combined problem of optimal portfolio selection and consumption rules for an individual in A continuous-time model where his income is generated by returns on assets and these returns or instantaneous "growth rates" are stochastic. P. A. Samuelson has developed a similar model in discrete-time for more general probability distributions in a companion paper. Author derives the optimality equations for a multi-asset problem when the rate of returns is generated by a Wiener Brownian-motion process. A particular case examined in detail is the two-asset model with constant relative risk-aversion or is elastic marginal utility. An explicit solution is also found for the case of constant absolute risk-aversion. The general technique employed can be used to examine a wide class of inter temporal economic problems under uncertainty. In addition to the Samuelson paper there is the multi-period analysis of Tobin Phelps has a model used to determine the optimal consumption rule for a multi-period example where income is partly generated by an asset with an uncertain return. Mirrless has developed a continuous-time optimal consumption model of the neoclassical type with technical progress a random variable.

Markowitz's Portfolio Selection: A Fifty-Year Retrospective

MARK RUBINSTEIN, *THE JOURNAL OF FINANCE* · VOL. LVII, NO. 3 · JUNE 2002

In his Paper MARK RUBINSTAIN Stated that Markowitz had the brilliant insight that, while diversification would reduce risk, it would not generally eliminate it. Markowitz's paper is the first mathematical formalization of the idea of diversification of investments: the financial version of the whole is greater than the sum of its parts. Through diversification, risk can be reduced but not generally eliminated. without changing expected portfolio return. Markowitz postulates that an investor should maximize expected portfolio return while minimizing portfolio variance of return

Probably the most important aspect of Markowitz's work was to show that it is not a security's own risk that is important to an investor, but rather the contribution the security makes to the variance of his entire portfolio that this was primarily a question of its covariance with all the other securities in his portfolio.

A note on applying the Markowitz portfolio selection model as a passive investment strategy on the JSE

AJ du Plessis and M Ward, Investment Analysts Journal – No. 69 2009, page 39-46

In his Work AJ du Plessis and M Ward Writes that Harry Markowitz is generally acknowledged as the father of modern portfolio theory after publishing his seminal paper in 1952, for which he (jointly) received a Nobel Prize in 1990. Markowitz (1952) and Tobin (1958) showed that it was possible to identify the composition of an optimal portfolio of risky securities, given forecasts of future returns and an appropriate covariance matrix of share returns. Authors in their research endeavors to apply the theory of Markowitz to the Johannesburg Securities Exchange (JSE) to establish whether an optimal portfolio can be identified and used as an effective trading rule. Weekly data over 11 years on the top 40 JSE listed companies was analyzed to construct Markowitz mean-variance optimized portfolios using ex-ante data. The optimal portfolio was then selected and re-balanced periodically, and the returns compared against the FTSE/JSE ALSI40 index. The study found that the trading strategy significantly outperformed the market in the period under review.

A SIMPLIFIED PERSPECTIVE OF THE MARKOWITZPORTFOLIO THEORY

Myles E. Mangram, SMC University, Switzerland GLOBAL JOURNAL OF BUSINESS RESEARCH - VOLUME 7 - NUMBER 1 - 2013

This paper presents a simplified perspective of Markowitz' contributions to Modern Portfolio Theory, foregoing in-depth presentation of the complex mathematical/statistical models typically associated with discussions of this theory, and suggesting efficient computer-based' short-cuts' to these performing these intricate calculations. this analysis focuses on Markowitz' contributions to MPT in context of the theoretical and technological advances that have occurred since his theory first came to light in 1952. Since then, the field of financial investing has undergone major evolutions that include significant advances in the financial concepts and tools available to investors and investment professionals. While substantial part of MPT is devoted to statistics-based mathematical modeling and formulas which support its theoretical assumptions, this analysis expands upon this body of literature by focusing on a simplified perspective of its key theoretical assumptions. At the same time, examples are strategically included to demonstrate how modern computing technology (specifically Microsoft Excel) can be used as highly efficient 'short-cuts' to make the often complex calculations needed to support MPT, thus allowing for more attention to be placed on MPT's theoretical underpinnings.

OPTIMAL PORTFOLIO CONSTRUCTION WITH MARKOWITZ MODEL AMONG LARGE CAP'S IN INDIA

NITHYA.J Research journal's Journal of Finance Vol. 2 | No. 2 February | 2014 ISSN 2348-0963

The aim of this paper was to construct effective portfolio for the large cap companies. This study enables to know the performance of some Nifty Fifty companies having larger market capitalization. The study was conducted with the financial data for four Years and the study was limited to 15 large cap companies from nifty fifty They were a combination of stocks from various sectors namely Banking, Information Technology, Energy, FMCG, Infra, Parma, etc. The analysis was carried out in this project was on the basis of risk & return and on Sharpe index model. This project suggested best investment decision in selected large cap industries.

CONSTRUCTION OF OPTIMAL EQUITY PORTFOLIO USING THE SHARPE INDEX MODEL

Dr.K.V.Ramanathan, K.N. Jahnnavi, IJBARR Review, Vol.2, Issue.3, Jan-March, 2014

The main focus of this research is to construct an optimal equity portfolio with the help of Sharpe index model. In this research, media and entertainment sector has been taken into consideration for constructing the optimum portfolio. Twenty companies like PVR, Sun Network, INOX, Raj television have been selected. Than excess to beta ratio has been calculated and ranks has been given to the companies based on this ratio. The cut-off point was calculated based on the highest value and then cut-off point has been used to calculate the proportion of money to be invested in each stocks. This research is helpful to take investment decision.

CONSTRUCTION OF EQUITY PORTFOLIO OF LARGE CAPS COMPANIES OF SELECTED SECTORS IN INDIA WITH REFERENCE TO THE SHARPE INDEX MODEL

P.Varadharajan, Ganesh IJPSS Vol.2 Issue 8, Aug. 2008.

In this research 18 stocks from three different large caps sectors has been analyzed and The risk and return of all the stocks has been studied individually. For constructing the portfolio in this project Author have selected companies from three sectors namely Power Sector, Shipping Sector and Textile Sector. From each sector six companies were selected, then based on the study Author selected top five stocks to form an optimum portfolio. The final step in the process is to determine the number of shares of each stock to be purchased.

A NOTE ON APPLYING THE MARKOWITZ PORTFOLIO SELECTION MODEL AS A PASSIVE INVESTMENT STRATEGY ON THE JSE

AJ du Plessis and M Ward Investment Analysts Journal – No. 69 2009*

This research endeavors to apply the theory of Markowitz to the Johannesburg Securities Exchange (JSE) to establish whether an optimal portfolio can be identified and used as an effective trading rule. Weekly data over 11 years on the top 40 JSE listed companies was analyzed to construct Markowitz mean-variance optimized portfolios. The optimal portfolio was then selected and re-balanced periodically, and the returns compared against the various other portfolio index. The study found that the trading strategy significantly outperformed the market in the period under review.

PORTFOLIO SIZE AND DIVERSIFICATION EFFECT IN LITHUANIAN STOCK EXCHANGE MARKET

Vilija, Egle, Ras, a Engineering Economics, 23(4), 2012.

In this Paper researchers have focused on measuring the effect of diversification rather than portfolio efficiency. The research is done in Lithuanian Exchange Market based on daily stock prices during 2009–2010 Portfolios in different size are formed in order to get the non-systemic risk elimination effect. Authors of the article compare the diversification effect of naive and differently-weighted stocks portfolios. The diversification effect is evaluated by percentage of diversifiable risk elimination and depending on the number of stocks in portfolio. The research results showed that the major difference between diversification effects of naive and differently weighted portfolios is when they consist of smaller number of stocks.

THE IMPACT OF DIVIDEND POLICY ON SHARE PRICE VOLATILITY IN THE MALAYSIAN STOCK MARKET

Mohammad, Aref, Nejat Journal of Business Studies Quarterly 2012, Vol. 4, No. 1, ISSN 2152-1034

The purpose of this study was to examine the relationship between dividend policy and share price volatility with a focus companies listed in Malaysian stock market. For this purpose, a sample of 84 companies from 142 companies listed in main market of Malaysia was studied for a period of six years from 2005 to 2010. The relationship between share price volatility with dividend yield and dividend payout, were examined by applying multiple regression. Based on findings of this study, it has been proved that dividend yield and payout has a great impact on share price volatility amongst other variables.

EFFECT OF FUNDAMENTAL AND STOCK MARKET VARIABLES ON EQUITY RETURN IN PAKISTAN

Abdul Haque1, Suleman Sarwar Sci.Int.(Lahore),25(4),981-987,2013 ISSN 1013-5316

This study has identified the significant determinants of equity returns in Pakistan for this study Author has used data of 394 non-financial firms, listed in Karachi Stock Exchange over the period 1998- 2009. The results provide support to the standard Capital Asset Pricing model (CAPM) and suggest that equity returns respond to market premium. Moreover, author studied the impact of various fundamental market variables like Book to market value, earning to price, cash flow to price, and volatility on equity returns. Author has used descriptive analysis to find the impact and importance of each variable on equity Return at Karachi Stock Exchange.

MARKOWITZ' MODEL WITH FUNDAMENTAL AND TECHNICAL ANALYSIS –COMPLEMENTARY METHODS OR NOT

Branka, Tea Poklepović, Zdravka Croatian Operational Research Review, Vol. 2, 2011

This paper has empirically explored important methods i.e. fundamental and technical analysis for stock selection in an optimal portfolio. The aim was to investigate if they are complementary, and to determine the way to combine them into the process of portfolio selection. The research was conducted on a 15 most traded stocks on the Croatian capital market. The research revealed that these methods are complementary each other. In the portfolio selection process it is

necessary to include each of the methods to perceive all the relevant which leads to the best results. For the purpose of selecting stocks in a portfolio it is important to start with fundamental analysis.

ON THE OPTIMAL SELECTION OF PORTFOLIOS UNDER LIMITED DIVERSIFICATION

Jay Sankaran, Dept. of management and Information System, Uni. Of Auckland, New Zealand

Authors has addressed the problem of selecting portfolios that are optimal among all those portfolios that comprise at most a pre-specified number, k , of securities. They considered two criteria: maximizing the ratio of the average return to the standard deviation; and maximizing the correlation with a specified market-index. Author has considered two related problems for optimal portfolio selection. The first is to find portfolios that are mean-variance efficient and that comprise a pre-specified number of securities. The second problem is to find portfolios that optimally track a specified market-index and whose average returns equal the average return on the index.

DIVERSIFICATION AND THE REDUCTION OF DISPERSION: AN EMPIRICAL ANALYSIS

Evans, J. L., & Archer, S. H., — *Journal of Finance*, Volume 23, Issue 5, (1968) 761-767.

Author has studied the empirical relationship between portfolio size and its risk /return sizes based on all the stocks listed on the New York Stock Exchange. This paper examines the reduction in return of randomly selected portfolio as per the number of securities included in that portfolio. Author demonstrates that there is stable and predictable relationship exists between number of securities in portfolio and the return of this portfolio. This paper Also throws considerable light on decision of optimal number of securities to be included in portfolio.

HOW MANY SECURITIES MAKE A DIVERSIFIED PORTFOLIO IN KLSE STOCKS?

G.S. GUPTA, CH'NG HUCK KHOON

This paper examines the relationship between the portfolio risk and number of stocks in portfolio of the Malaysian stocks to determine the optimum size for the portfolio. A sample of 213 stocks traded on the KLSE is considered to form sets of portfolios using random diversification approach based on statman techniques. On an average, a well-diversified portfolio of the Malaysian stock is found to contain at least 27 randomly chosen securities.

OPTIMAL PORTFOLIO SELECTION FOR THE SMALL INVESTOR CONSIDERING RISK AND TRANSACTION COSTS

Rainer Baule, *Spectrum* (2010) 32:61–76 DOI 10.1007/s00291-008-0152-5

The Author found the direct application of classical portfolio selection theory is problematic for the small investor because of transaction costs in the form of bank and broker fees. In particular, fees force the investor to choose a comparatively rather small selection of assets. The existence of transaction costs leads to an optimization problem that juxtaposes those costs against the risk costs that arise with portfolios consisting of only a few assets. An empirical study shows that, for smaller investment volumes, transaction costs dominate risk costs so that optimal portfolios contain only a very small number of assets. Based upon these results, the cost-effectiveness of direct investments is compared.

CAPITAL ASSET PRICING MODEL: SHOULD WE STOP USING IT?

Valeed A Ansari, *Viklpa Vol. 25, No. 1, January-March 2000*

The Capital Asset Pricing Model (CAPM) predicts that expected returns on securities and market β are adequate to describe the cross-section of expected returns. There is a controversy regarding the empirical validity of CAPM. This article reviews the content and scope of the model, examines the issues in the controversy, and provides an empirical assessment of the model in India. It notes that the evidence is not sufficient to drop the use of CAPM but one must, however, recognize and understand its limitations.

CONCLUDING REMARKS

The methodology for data assimilation of this analysis included an extensive literature review on the topic of MPT and related concepts. This review included comparative analysis of earlier MPT works to those of more current economic theorists. In particular, derived data was generated from the current literary works of Benniga (2006). His evolved suggestions of the application of Microsoft Excel to various statistical computations of MPT were modified, tested, and verified against respective proven mathematical models. In spite of its shortcomings, including overly complicated mathematical musings and a reliance on oft disproven theoretical assumptions, MPT has established itself as the gospel of modern financial theory and practice. The gist of MPT is that the market is difficult to beat and those who are successful in doing so are those who effectively diversify their portfolios and take above-average investment risks. In any event, Markowitz' portfolio selection contributions to the MPT model can be simplified (as attempted here) and can be solved more efficiently using modern financial tools such as Microsoft Excel. In that regard, Wharton's Dr. Benniga (2006) makes an excellent argument that "Excel is a great statistical toolbox—someday all business-school statistics courses will use it" (p. 338).

The important thing to remember is that the model is just a tool although perhaps the biggest hammer in one's financial toolkit. It has been nearly sixty years since Markowitz first expounded on MPT and it is unlikely that its popularity will wane anytime in the near future. His theoretical conclusions have become the spring-board for the development of other theoretical analysis in the field of portfolio theory. Even so, Markowitz' portfolio theory is subject to, and dependent upon, continued 'probabilistic' growth and expansion.

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UNIFIED PAYMENT INTERFACE (UPI) FOR LESS-CASH INDIA

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ABSTRACT

The study finds out that UPI will serve the three great purposes - universal electronic payments, a less cash society and financial inclusion using latest technology trends, as envisaged in the Payment System Vision Document 2012-15 of Reserve Bank of India. When UPI will be widely used on a mass scale by majority of India's vast population for their routine payments – for payment of a chhota recharge of Rs. 10/- to payments at the local Kirana Store, Sabzi Mandi, or for payments to Rikshawwala or for the payment of Loan EMI of your big house, it will definitely bring a great revolution, truly leading to a less cash economy in India. The way WhatsApp (free SMS as called in rural India) brought a revolution in the messaging system across the world, it is expected that UPI will one day bring similar revolution in India thereby demonstrating UPI as the WhatsApp Moment for India, as appropriately described by Nandan Nilekani, Advisor to National Payment Corporation of India (NPCI). Wider acceptance of UPI may gradually make other modes of payment (Cash, Cheques, even ECS/NACH and even NEFT) redundant or obsolete in few years down the line. Government of India & various State Governments and local bodies (including proposed smart cities in the country) can capitalize on the infrastructure of UPI to collect various taxes and receivables from its citizens in a smart way. We hope that UPI will significantly contribute to make India a less cash economy in the future.

KEYWORDS

Unified Payment Interface (UPI), universal electronic payments, less cash society, financial inclusion.

INTRODUCTION

Unified Payment Interface (UPI) is a mobile app based new generation peer-to-peer instant payment solution. UPI application, once installed on smart phone, can be used to transfer money instantly to any account easily, conveniently and securely. UPI has been designed to enable all bank account holders to send and receive money using the smart phones with a single identifier such as Aadhaar number, mobile number, virtual payment address etc., without providing any bank account information. What is unique about UPI is that the beneficiary can now initiate the payment request. UPI is the advanced version of Immediate Payment Service (IMPS) and it can be used for instant payment on 24x7x365 basis. UPI is a great initiative by the National Payment Corporation of India (NPCI), which is umbrella organization for all retail payment systems in India.

CORE FEATURES OF UNIFIED PAYMENT INTERFACE (UPI)

1. User can use his/her mobile phone as the primary device for all payments – person to person (P2P), person to entity (P2E) and entity to person (E2P).
2. User can pay someone (push) as well as collect payment from someone (pull).
3. User can use Virtual Private Addresses (VPA) which are aliases to account numbers, thereby avoiding sharing of his/her account details.
4. User can send a payment collection request to others with a “pay by date” to allow the payment request to be “snoozed” and paid later before the expiry date.
5. User can use UPI 24x7x365 with instant debit & credit of accounts.
6. User can pre-authorize multiple recurring payments similar to ECS/NACH (to pay utility bills, school fees, insurance premiums etc.) with one-time secure authentication and rule based access.
7. User can make payments using 1-click 2-factor authentication using their mobile phone.

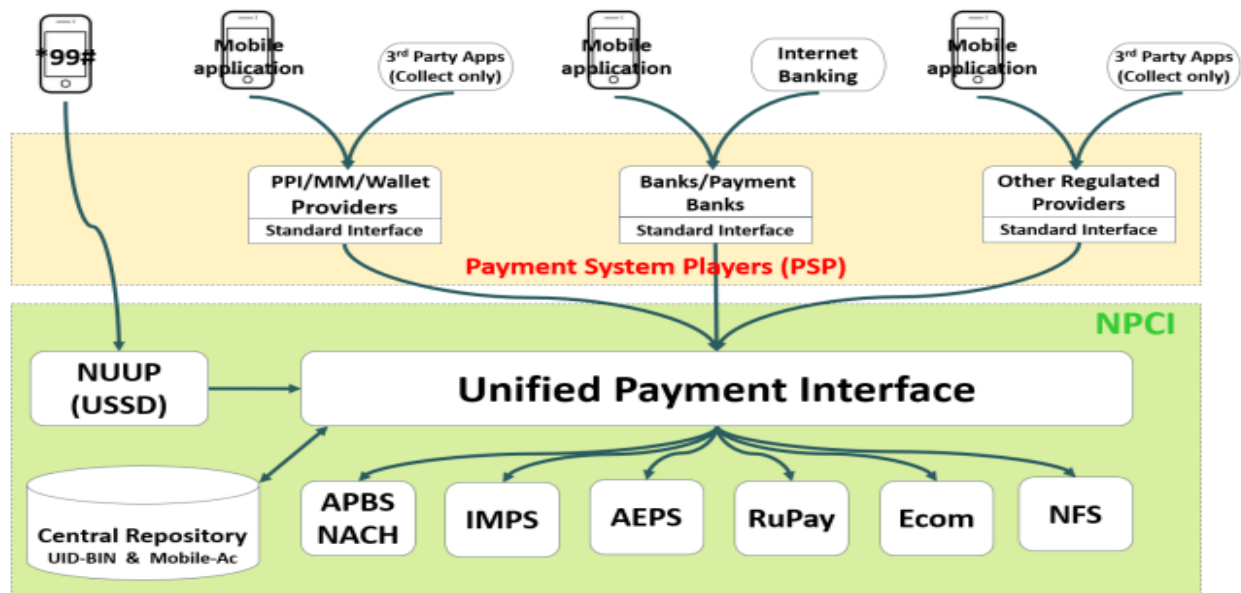
HOW UPI WORK?

Let us imagine that you place order online for a new iPhone on an e-commerce site (or mobile app) for your spouse. You select “UPI” as the mode of payment & provide your virtual private address for the payment, then a pop-up/push notification is received on your UPI app requesting for a confirmation of the payment. You enter your secret MPIN to authenticate the payment. Immediately you get the confirmation of payment being successful and confirmation of the online purchase from the merchant.

When you select the mode of payment as UPI and provide your virtual address, the transaction request hits merchant's server, it is immediately passed on, to the acquiring bank's server. This transaction is then pushed, through NPCI, to your bank, where the actual account details are fetched up against the mapped virtual ID and the credentials are validated and your account is debited. The confirmation is again pushed back to UPI servers (at NPCI) and in turn it initiates a credit message to the merchant's acquiring bank and the credit to the merchant happens in real time.

The Architecture of Unified Payment Interface (UPI) - how various parties/players/applications communicate with UPI, is described below in Figure-1:

FIGURE-1: UPI ARCHITECTURE, Source-NPCI



HOW IS UPI DIFFERENT FROM OTHER PAYMENT METHODS?

UPI is having some distinctive features which make it special and different from other modes of payments. Features like Virtual Private Addresses, Payment Collect Facility and a lot of scope for innovations for making payments & collecting payments based on QR Code etc can revolutionize the retail payment system in India and wider acceptance of UPI for routine payments by the common man can lead to less cash economy in the future.

1. VIRTUAL PRIVATE ADDRESS

UPI has a unique feature to identify a bank customer by an email like address called "Virtual Private Address". For example, an Oriental Bank of Commerce customer named Raj can have a virtual private address raj@obc. A customer can also choose to use the Aadhaar number or mobile number as the name instead of the short name for the virtual address like 123456789012@obc or 9898989898@obc. A customer can have multiple virtual private addresses for multiple accounts in various banks. In order to ensure privacy of customer's data, there is no account number mapper anywhere other than the customer's own bank. This allows the customers to freely share the virtual address with other parties. Unlike current payment methods – Internet Banking, Debit Card or Credit Card - wherein one needs multiple credentials in the form of customer id, account number, IFSC Code, card no etc., UPI allows customer to send or receive payments on the basis of a 'Virtual Private Address' (VPA). Thus, the feature of VPA is very significant from security point of view. Virtual Private Addresses provide innovative mechanisms for customers/merchants to create virtual private addresses with attached rules for amount, time/frequency and payees.

2. COLLECT PAYMENT

With the unique feature of "Collect" to request for payment from other parties, UPI is very different from all other modes of payment. With "Collect" feature, the beneficiary can initiate the request for payment from the sender (called pulling the transaction). Imagine you hired an auto for your journey and you need to pay Rs. 200 to the auto driver. Now the auto driver asks you your virtual address and initiates the request of payment of Rs. 200/- through UPI. Now you receive the payment request in your UPI app & you confirm the payment using your MPIN. Then the auto driver gets the payment and gets a confirmation message also. Using this collect feature, Insurance companies can now request for insurance premium from customers before due date & customer can confirm the payment using UPI and thus insurance premium is paid. UPI also has the ability for sending collect requests which can be "snoozed" and paid later before expiry date without having to block the money in the account until the customer is ready to pay.

3. SINGLE APP- MULTIPLE BANK ACCOUNTS

Customer can link multiple bank accounts in the UPI app. Bank accounts may be from different banks. Now any bank customer can use UPI of any bank and link all his/her accounts of different banks. Following table illustrates examples on how any bank customer can use any bank's UPI & link his/her accounts as detailed in Table-1:

TABLE 1: CUSTOMER USES ANY BANK UPI & LINKS ALL ACCOUNTS IN VARIOUS BANKS

Sl no	Customer of	Using UPI App of	Has linked Accounts of
1	Union Bank of India	Union Bank of India	Union Bank of India, ICICI Bank, SBI
2	SBI	ICICI	Uco Bank, HDFC Bank, SBI
3	Citi Bank	OBC, Axis Bank	Axis Bank, Citi Bank
4	Canara Bank	Axis Bank	Canara Bank

4. SAFE & SECURED PLATFORM

UPI allows banks and other players to innovate and offer superior customer experiences to make online payments and collect payments in a convenient, easy and secured manner. It conforms to the guidelines of Reserve Bank of India on two factor authentication for carrying out UPI transactions. Customer's mobile phone essentially becomes a "what you have" credential (first factor authentication), while MPIN (something you know) serves the second factor authentication to complete the UPI transaction. In the future, scanning of iris or fingerprint (from Aadhaar database), in place of MPIN, can be used as the 2nd factor authentication.

5. OPPORTUNITY FOR CUSTOMERS TO COMPARE FEATURES IN UPI APPS

Since a bank customer can use any bank's UPI (not just his/her own bank UPI), this will throw a new challenge for the banks to provide best features in their UPI, else no user will use that bank's UPI. Since today's customers are tech-savvy & use social media to get knowledge on which bank UPI is best (as reviewed by the other users), only the best UPI apps will be used by the customers. In other words, that particular bank's UPI which has more features, easy to use Interface and best customer support will be more popular among the UPI users, irrespective of bank he/she has account with.

6. PAYMENT THROUGH SCANNING OF QR CODE

To make the payment to the grocery shop in the Mall, all you have to do is to scan the QR Code printed on its Invoice using your UPI Application which will display the amount to be paid, you confirm the payment using your UPI MPIN and the payment is made instantly. To receive such payments even the vegetable vendor on the street or the auto driver can display the virtual private address or even a QR Code.

UPI - THE ROAD AHEAD

Smart phones have penetrated deep into our lives. India has already crossed 1 billion mark in mobile subscription. With introduction of affordable smart phones and call/data tariffs that are world's cheapest, mobile phone user base is set to grow exponentially in the near future in India. Unprecedented growth in smart phone users along with availability of high speed (3G/4G) mobile internet at very affordable costs is expected to further push the growth of UPI usage in India.

UPI offers a huge scope for merchants, e-retailers, insurance companies, educational institutes, Governments etc to offer very innovative methods of collecting payments. Payment collection by using the QR Code scanning will be widely used by merchants & e-commerce companies (particularly for Cash-on-delivery payments). Confirmation of payments through voice commands, 2nd factor authentication using biometric (Iris or fingerprint of Aadhaar) will be widely used in the future. More innovative methods will be used for various merchant payments as an alternative to POS transactions and in-app payments (like Ola, Uber etc.).

Banks may also offer support of local languages or payment instructions using voice commands in local languages in UPI. This will bring a revolution in rural India, where people can do mobile recharge by making the payment using voice commands. A father can send his son money by saying "please send 2000 rupees to Son Kapil" in UPI app. (It will search "Son Kapil" in Contacts & send the money to his Mobile number, authentication can be through scanning of Iris).

UPI is a significant part of the so called "*India Stack*". India Stack is a part of Nation's ambitious Digital India program aimed at treating information as a utility. It is a complete set of API (Application Programming Interface), made available under the Open API Policy, which can enable development of payment-enabled Apps. It includes:

- a) Aadhaar for biometric authentication through scanning Iris or fingerprint.
- b) DigiLockers (safe deposit locker for issue, storage and use of electronic documents),
- c) e-Sign (digital signature acceptable under the laws of the land)
- d) *Unified Payment Interface (UPI)* for financial transactions

The India Stack enables Apps that could open up many opportunities in financial services, healthcare and education sectors of the Indian economy. India Stack has the potential to revolutionize the way government services of the future will be delivered in a country like India with huge population. This provides great business opportunities for the tech-savvy start-up companies to solve the problems in financial transactions, healthcare and education through very innovative solutions.

CONCLUSIONS

UPI will serve the three great purposes - universal electronic payments, a less cash society and financial inclusion using latest technology trends, as envisaged in the Payment System Vision Document 2012-15 of Reserve Bank of India. When UPI will be widely used on a mass scale by majority of India's vast population for their routine payments – for payment of a chhota recharge of Rs. 10/- to payments at the local Kirana Store, Sabzi Mandi, or for payments to Rikshawwala or for the payment of Loan EMI of your big house, it will definitely bring a great revolution, truly leading to a less cash economy in India. The way WhatsApp (free SMS as called in rural India) brought a revolution in the messaging system across the world, it is expected that UPI will one day bring similar revolution in India thereby demonstrating UPI as the WhatsApp Moment for India, as appropriately described by Nandan Nilekani, Advisor to National Payment Corporation of India (NPCI). Wider acceptance of UPI may gradually make other modes of payment (Cash, Cheques, even ECS/NACH and even NEFT) redundant or obsolete in few years down the line. Government of India & various State Governments and local bodies (including proposed smart cities in the country) can capitalize on the infrastructure of UPI to collect various taxes and receivables from its citizens in a smart way. We hope that UPI will significantly contribute to make India a less cash economy in the future.

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IMPACT OF SPIRITUALITY AT WORKPLACE ON ORGANISATIONAL PERFORMANCE

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ABSTRACT

Spirituality at Workplace is concerned with an individual's meaning and purpose of work depending on inner life, meaningful work and community. It recognizes the fact that employees have an inner life, something above and beyond money which needs to be nourished for their better enactment of work. The present paper is an attempt to study how this workplace spirituality increases their performance and they start associating themselves to their workplace through commitment at various levels. We are also striving to see how meditation at work brings an insight or wisdom to employees so that they take better decision. Work takes new meaning and becomes more relevant when it is seen as a calling, a sacred duty, a service opportunity or a way to serve God, other deities, or a higher purpose. Hence, productivity and performance increases as a result of deeper meaning at work.

KEYWORDS

connectedness, meditation, organizational commitment, spirituality, work performance.

INTRODUCTION

The word Spirituality has been derived from a Latin word-'spiritus', meaning vapor, breath, air or wind. (Milliman, 1994) defines it as "expressing one's desire to find meaning and purpose in his/her life whereas (Dehler and Welsh, 1994) define it as "a specific form of work feeling that energizes action".

Different researchers have postulated different definitions but the main idea is sharing some common attachment and togetherness.

Furman, Benson, Canda and Grimwood (2005) define spirituality in terms of an attitude or approach to encompassing a search for meaning, purpose and morally fulfilling relations with self, other people, the encompassing universe, and ultimate reality.

Similarly, Staude (2005), sees spirituality as a transformational process through which the different facets of life are integrated (physical, emotional, occupational, cerebral and rational). That is, spirituality involves a connectedness to oneself, others, nature and to a larger meaning or presence. It is strongly related with creativity, play, love, forgiveness, compassion, trust, reverences, wisdom, faith and sense of oneness.

Spirituality which is an important part of a person's life has two crucial elements, i.e., transcendence of self and self-gratification i.e. a belief that one's activities have meaning and values which are far more beyond the economic benefits.

Spirituality, when practiced at the professional front is known as Workplace Spirituality.

WORKPLACE SPIRITUALITY

Spirituality at workplace is a movement which began in 1920s. According to Ashmos and Duchon, 2000, workplace spirituality is the recognition that employees have an inner life which nourishes and is nourished by meaningful work taking place in the perspective of a community.

Spirituality in the context of work is increasingly gaining prominence in business and management. There has been a paradigm shift from a mechanical dimension which values rationality and science to a spiritual dimension which values consciousness and understanding.

Introduction of spirituality at workplace makes people more attached to their organization. They experience a sense of obligation and feel committed towards the organization. As a result, they reciprocate in the form of more productivity and higher commitment. This is due to the reason that a spiritual workplace allows them to experience a sense of psychological safety. The spiritual employees feel that they are valued as human beings and feel respected. It allows them to experience a sense of some purpose, self-determination, enjoyment and belonging.

An individual working in a spiritual organization feels part of something bigger than him/ herself where the self is integrated and he is able to reconcile the several dimensions of self at work in an authentic way.

Work takes new meaning and significance when it is seen as a calling, a sacred duty, a service opportunity or a way to serve God, other deities, or a higher purpose (Paloutzian, Emmons & Keortge, 2003). Therefore, when work is seen as a calling, it becomes more meaningful and subsequent increase in productivity and commitment of employees (Paloutzian et al. 2003; Reave, 2005). As a result, productivity and performance increases as a result of deeper meaning at work, as well as how spirituality at work can provide employees a sense of meaning and purpose.

According to (Mitroff, 2003), in today's organization, people only bring their arms and brains to work and not their souls. In order to develop them as all-inclusive human being and tap their full creativity and potential, spiritual lessons need to be imparted to the employees.

Slowly and gradually, organizations' interest in this arena has also been increasing. To name a few, Hewlett-Packard, Ford, AT & T, Intel, Wal-mart, Xerox, Manhattan Bank, DuPont, etc. have created special programs to incorporate spirituality in the workplace. To their surprise, positive results have been observed.

DIMENSIONS OF WORKPLACE SPIRITUALITY

According to Milliman et al. (2003), there are three dimensions of Workplace Spirituality.

- A) Meaningful work/Individual Level: Here, the individual finds peace for his own self and feels that work gives a meaningful purpose to him/her.
- B) Sense of Community/Group Level: At this level, all employees work with each other. They feel so inter-connected that they work for a common purpose and support each other. There is some relationship between one's inner self and the inner self of other people.
- C) Value Alignment/Organization level: At this level, there is an alignment between both the employees and the organization. The employees are focused for organization's mission and goals. On the other hand, the organization cares about the employees.

SPIRITUALITY AT WORK IS NOT RELIGION

Spirituality at workplace is not about religion or getting people follow a specific belief system. The two are often considered same but in reality, it's not true. Infact, the two should be studied as two different constructs.

Spirituality is not to be confused with religion. "It's not about converting people. It's about knowing that we are all spiritual beings having a human experience" (Laabs, 1995, p. 61).

While religion looks outward focusing on rituals, adhering to dogma, and attending church services, spirituality looks inward focusing on personal experiences, demonstrating itself through behaviors, principles, and practices. Laabs (1995) concluded "It is spirituality and not about making people believe a system or a thought system or a religious system. It's about knowing that every person has within themselves, a level of truth and integrity, and that we all have our own divine power" (p. 61).

ORGANISATION MODEL BY ALLEN AND MEYER

It is one of the most cited model of organizational commitment developed by Allen and Meyer exhibiting the various behavior of employees towards their commitment. Although spirituality at work is gaining momentum, still there are employees, who stay with the organization, not because they are very much satisfied but due to some other factors.

On the basis of such varied behavior of employees, there are three commitment components: affective, normative and continuance.

1. **Affective component:** It recognizes those employees who have an emotional attachment towards the organization. It is likely that affectively attached employees will be motivated to make greater contributions to the organization, hence leading to lower turnover, reduced absenteeism, improved performance and increased organizational citizenship behaviors.
2. **Normative component:** It recognizes those employees who remain with the organization as they feel a sense of obligation towards it. They tend to make positive contributions.
3. **Continuance Component:** It recognizes those employees who look at the perceived costs associated with leaving the organization. They feel no tendency to contribute to the organization beyond what is needed to keep their jobs.

Each of these components differ from each other. The stronger the commitment, the stronger the intention to stay.

WORKPLACE PERFORMANCE AND MEDITATION

It is believed that when organizations infuse spirituality at their workplace, the performance of employees increase manifold. Spirituality, in the form of frequent meditation classes at work aims to develop wisdom, i.e., it increases the capacity of employees to solve problems in a better way and with greater clarity. (Insight) meditation is an ability of a person to observe the moment, acknowledge thoughts and feelings without preconception. This type of meditation leads to enhanced state of awareness, where a person having peace at mind is able to ignore distractions and take wiser actions.

The more spiritual people are, the more they practice meditation and the more they meditate, the better, they perform their work.

FINDINGS

1. People want to realize their full potential as whole human beings, either on the job or off the job and wish to work for ethical organizations
2. They want to perform creative and meaningful work
3. They realize that making money is important but not the most important goal.
4. They feel more committed to the organization.
5. There is increased work performance and reduced turnover.
6. More spiritual organizations are the 'more profitable' ones.

CONCLUSION

There has been a paradigm shift from a mechanistic dimension which values rationality and science to a spiritual dimension which values consciousness and understanding.

This paradigm shift recognizes that people work not only with their hands but also with their heart and spirit (Ashmos and Duchon, 2000). It is only when people work with a committed spirit, that they can find a kind of meaning and purpose, a kind of fulfillment which means the workplace can be a place where people can express their whole or entire selves.

Barrett (n.d.) argued "Successful business leaders of the 21st Century will need to find a dynamic balance between the interests of the corporation, the interest of the workers, and the interests of society as a whole" (p. 1). This can be achieved only when organizations link the company's goal of profits with the employees' goal of finding meaning and purpose in their work. Once these things are achieved, then optimal performance follows.

Meditation not only provides, individuals discover their own spiritual side, but those who are trained spiritually are able to transfer their newly learned ability and skills to their workplace, thereby increasing work performance.

Research has shown that there are numerous benefits associated with integrating spirituality in the workplace. The employees and organization together reap like results while incorporating meditation techniques along with it. This means higher profits, low absenteeism, high morale and less stress.

Last but not the least, when we are doing repetitive or monotonous work frequently, it may lead to existential sickness. Moreover, when there is lack of meaning or purpose in a particular work, employees tend to feel separated or alienated from oneself. This causes frustration and reduced productivity.

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BUILDING BRAND VALUE THROUGH INNOVATIVE CSR PRACTICES**SHWETA SINGH****ASST. PROFESSOR****AVGSIMC****SWAMI VIVEKANAND SUBHARTI UNIVERSITY****MERRUT****ABSTRACT**

The purpose of the study is to measure the impact of various CSR techniques on the brand image and to analyze the inputs of CSR initiatives as a catalyst to the increased brand value. The study is Primary data based conducted on a sample of 40 respondents in Meerut-Modinagar region. The findings show that the customers tend to become more loyal for the organizations which are engaged in societal development activities. It was also found that the customers need to be made more aware about the CSR practices to stimulate their ability to identify CSR focused organizations. Corporate Social Responsibility has evolved various ways for the organizations to develop and sustain in the dynamic environment where the brand image of an organization or a brand is not limited to the product's quality or price only. CSR has now become a value proposition tool for the companies which endeavor to contribute to the under privileged sections of the society catering to their developmental needs through assisting and uplifting them. Such an effort makes a direct positive impact on the loyalty status of a customer or a potential customer towards the brand which helps the organizations boosting their brand value. The major findings of the study strengthen the need of incorporating customer educational programs by the organizations to make this value-proposition tool more effective and fruitful for them.

KEYWORDS

corporate social responsibility, customer loyalty, value proposition, brand equity.

INTRODUCTION

Corporate Social Responsibility is not mere a term but a deep rooted concept through which companies are trying to prove their worth through sharing a part of their profit with the society they operate in. As the market is more value-centric now, the organizations exert to build and enhance value of the organization in the eye of the customer they deal with. Corporate Social Responsibility has evolved various ways for the organizations to develop and sustain in the dynamic environment where the brand image of an organization or a brand is not limited to the product's quality or price only. Customers, now-a-days see the brand as a whole and keep all the related aspects in mind before making a purchase. CSR has now become a value proposition tool for the organizations which endeavor to contribute to the under privileged sections of the society catering to their developmental needs through assisting and uplifting them. Such an effort makes a direct positive impact on the loyalty status of a customer or a potential customer towards the brand which helps the organizations boosting their brand value. The customers, as observed through previous studies, are becoming socially responsible and are willing to follow ethical codes and try to behave eco-friendly. Using socially responsible brands is a way to make them deliver tier stake to the society. Socially responsible Organizations/Brands are putting more concern to strategic CSR rather than philanthropic CSR. They are using innovative ways to contribute to the CSR requirement on one hand and, on the other hand, they are attracting customer through value-positioning. Further, Mandatory CSR by the Govt. of India is a welcome step which would enhance customers' trust in the products. This compulsion would give rise to the need of bringing more innovative practices in order to make your brand noticed by the customers. In a market, where all the brands are projecting themselves as socially responsible, there would be a dire need of differentiation and the brands would need to focus on strategic CSR practices rather than philanthropic CSR practices. The channels of communication too would need to be redesigned in order to keep the customers updated about a brand's CSR performance. Improved CSR performance and its timely projection would build goodwill of the brand in the mind of the customers and will improve its reputation in the market.

Many studies have suggested that there is a positive impact of increased CSR practices on the brand image which determines the general perception of the customers and prospects but which practices make more profit to the company in terms of customer repurchase or increased customer loyalty, this still needs to be studied. This study is focused to find such practices which derive more benefits to the organization and to make the organizations put their funds in the neediest sections for the overall development of the economy. The study differentiates between Strategic and Philanthropic CSR and brings out the core of both the approaches. Further the study extends to find out the relative efficiency of various communication channels adopted by the organizations to communicate their CSR efforts to the customers. As it is seen that many companies, who have extensive CSR structure do not pay much attention to publicize their efforts which leads to their failure in building reputation in the eye of the general public. To overcome such problems, the brands should focus on personalized publicity.

METHODS OF DOING CSR

CSR activities are not limited to the needy sections of the society. The phenomenon is diversified into various groups, each of which create a different impact on the minds of the customers. This is to be noted that these CSR activities are recorded from the global perspective (not specific to India) as India has made CSR statutory and listed only particular activities to be treated as CSR initiatives under section 135 of Companies Act, 2013. Some of the diversified areas in which CSR strategies can be implemented are as follows-

1. Customers- The customers provide the most important base to CSR activities as it is directly communicated and needn't be promoted. It, therefore has the direct impact on the customer. In order to increase the customer loyalty, the brands may adopt following strategies-
 - i. Focusing on the quality of products and services is widely accepted as the most effective practice of CSR to meet the customer expectation. If a brand becomes reliable in terms of quality of the product, the customer makes repurchase and spread the message through word-of-mouth communication. Attractiveness of a product makes sales but the quality assurance build the life-long loyalty.
 - ii. The development of feedback and easy redressal of issues is the another aspect a brand can consider as CSR initiative. Most of the online marketing companies are getting benefitted by following the process.
2. Employees- The brands which are taking CSR initiatives in the area are reaping the fruits of increased goodwill. Brands like Tata steel, Aditya Birla grp, TCS, ADP etc are focusing on the employee segment which in turn are contributing to their growth. Satisfied employees help in increasing goodwill of the company and dedicate their efforts towards their employer
3. Societal development- Providing funds and/or assistance to develop the needy sections of the society or helping them overcoming any loss caused by natural calamity or disaster is another very popular form of CSR. CSR activities can be done in the areas in following ways-
 - i. Free education for a particular community/Age-group/gender of a particular region/ state/ country.
 - ii. Donation to the schools for the affordable education of poor children.
 - iii. Village adopting in case of any natural calamity like flood, Drought or earthquake.
 - iv. Generating awareness among the mass population about any national/political/ environmental issue
4. Environment Protection- This time, when the whole earth is facing issues with environment conservation like, scarcity of water, dearth of natural resources etc., an initiative in this regard is the need of the hour. Environment Protection Following steps can be taken in this regard-
 - i. Utilization and reprocessing of waste.
 - ii. Use of environmentally healthy fuel

- iii. Gentle handling of electricity and water.
- iv. Optimum utilization of resources like double side printing and copying.
- v. Contributing to the research and development in the area.

SCOPE OF THE WORK

The research aims at analyzing the CSR practices of an organization as a value proposition tool and building brand equity and loyalty with the help of innovative CSR practices. The study also focuses on measuring the differential impact of various CSR techniques and various communication channels used by an organisation on its brand value. The study is primarily focused to measure the impact of various CSR initiatives on the increased brand value which is shown in the form of change in product repurchase behavior and increased customer retention. The researcher aims to find out the innovative practices in the area and their relative impact on the customer base so as to enable the organizations more competitive and more strategic in framing the CSR initiatives. The study is a primary research to be conducted on the customers of Meerut-NCR region.

Questions the study would answer-

- 1) Are the customers actually aware of the socially responsible behavior of the organizations? If yes, how do they categorize the activities as 'socially responsible' or 'ethical obligation'? If No, what are the various ways to make the generate awareness about the brand's social contribution in order to improve the reputation of the company?
- 2) Would the customer like to pay more for a brand which has made social contributions in the form of donations given to the needy sections of the society?
- 3) Does the investments made in CSR practices help the companies in promoting its brand through its customers?
- 4) To what extent social networking helps the company communicate its CSR efforts to its customers? What are the other good channels of communication for the purpose?
- 5) What are the innovative tools which can be added to the list of modern CSR practices?

Questions which require further exploration-

1. Do the companies consider CSR investments as a responsibility, a value enhancing tool or a burden?
2. Would the government regulation of making CSR investments mandatory for the organizations make an adverse impact on the customer perception of the brand being socially responsible?

LITERATURE REVIEW

From time to time researchers have attempted to analyse the importance of Corporate social responsibility for the sustainable development of the organization. Here the researcher has attempted to find the major studies done in the field in the Indian and overseas market. The end results of various studies have been mentioned. Corporate social responsibility (CSR)—voluntary social and environmental efforts of a company—is one of the most discussed and influential strategic business tools in the 21st century (Holstein 2008; Kanter 2010; Karnani 2010; *The Economist* 2009).

Kitchin, T. (2003) Corporate social responsibility: A brand explanation, Klein, J. & Dawar, N. (2004)- Corporate social responsibility and consumers' attributions and brand evaluations in a product-harm crisis, Atilgan, E., Akinci, S., Aksoy, S. & Kaynak, E. (2009)- Customer-based brand equity for global brands: A multinational approach etc are the few major studies done in the context in the overseas market.

Anna Torres, Tammo H. A. Bijmolt Josep A. Tribó in their study 'Generating Global Brand Equity through Corporate Social Responsibility to Key Stakeholders have argued that socially responsible policies have positive short-term and long-term impact on equity of global brands. We find that corporate social responsibility towards all stakeholders, whether primary (customers, shareholders, employees and suppliers) or secondary (community), have positive effects on brand equity value, where the secondary stakeholders are even more important than primary stakeholders. (Anna Torres, 2009),

Simone Staudt, Chris Y. Shao, Alan J. Dubinsky, Phillip H. Wilson in a group study found that if a customer perceives the CSR efforts of a company as high, the positive impact on CBBE (Customer based Brand Equity) is higher than if a customer perceives such efforts as relatively low. In addition, if CSR is perceived as relatively low, the impact on CBBE is still positive, but less than if CSR efforts are viewed as high. The findings of their study provided support to previous propositions and findings that CSR efforts influence the level of a company's CBBE (e.g., Hoeffler & Keller 2002; Lai et al. 2010; Torres, Bijmolt, & Tribó 2010).

Researchers Raj Sisodia, David Wolfe & Jag Sheth have the opinion that the companies with humanistic approach make great companies. They have called such firms as 'Firms of Endearment'. Their findings suggest that the Firms of endearment actually spend less on marketing as a percentage of sales yet earn greater profits, as the customers do most of the marketing (Raj Sisodia, David B. Wolfe and Jag Sheth, 2007).

In Indian context, comparatively fewer studies in the area have been reported, although some researchers have laid down remarkable ways for the organizations to improve their brand perception with the help of CSR efforts.

A study of India's top 500 companies about how they conduct their CSR practices. The study reveals that although companies consider their interaction with stakeholders and impact of its business on society, many companies are making token gestures towards CSR and only few companies have structured and planned approach. (Richa Gautam and Anju Singh, 2010)

Another study done by Indian researchers shows that The correlation between CSR and firm performance indicated that a more favorable aggregate CSR towards all the six stakeholders – employees, customers, investors, community, environment, and suppliers – resulted in a higher industry-adjusted ROA (Return on assets), FP (Financial Performance) and NFP (non-financial Performance) of the firms. (Supriti Mishra & Damodar Suar, 2010)

RESEARCH OBJECTIVES

1. To study Corporate Social Responsibility as a value proposition tool in order to increase customer-based brand value.
2. To find out the major areas for the companies to put their CSR investments in, so as to make optimum results in the form of increased brand value.
3. To ascertain the limits of various CSR practices to be regarded as 'socially responsible effort' from the viewpoint of the customers.
4. To find out the relative efficiency of different communication channels to create more customer awareness about the brand's social initiatives and activeness.
5. To enable the organizations to develop innovative ways to contribute to the overall societal development thus by generating more value to the customers.

METHODOLOGY

- a) Primary Sources/ Field work- The researcher has conducted sampling of the customers of Meerut-Modinagar region. In order to get unbiased results, the researcher has distributed the area evenly keeping into consideration the awareness level of the customers of the particular area.
- b) Instrument- The visitors of the shopping malls have been surveyed through a structured questionnaire. The responses were taken on a 5- point scale to understand the extent of each response. The questionnaire comprises of both open-ended & close-ended questions.
- c) Geographical area- The shopping malls and the retail stores of Meerut-Modinagar Region have been surveyed with the help of a structured questionnaire. 'Shoppriz Mall', Vishal Mega-Mart store in Meerut and Easy Day in Modinagar were the prime locations. The researcher has surveyed 40 respondents (Sample Size = 40).
- d) Research Design- The major focus of the research is to study the customer loyalty for a brand with respect to its CSR practices. The researcher aims to find out the key areas where a brand seeking customer loyalty should invest its funds. It is, therefore, decided to use exploratory design which fits into the pattern of the study. The customer responses are intended to be recorded with the help of a questionnaire and to be analysed on a five point scale in order to measure the length and depth of the impact created by the CSR initiatives of the company. The research is exploratory in nature which intends to find out the relationship between CSR activities of a brand and the brand loyalty of a consumer for that brand.

HYPOTHESES

The study tries to test the following hypotheses-

H1- CSR is an effective value proposition tool for a brand seeking loyal customers.

The hardcore loyal customers are not just attracted by any single factor but are attached to the overall performance of the brand. The brands exert to build reputation by following 'Customer is the king' mantra and try to resolve all the issues related to the product/brand and try to focus on Customer Relationship Management. Such efforts build a one-to-one relationship between the brand and the customer and customer pays loyalty by repurchasing and recommending further. The hypotheses tests that how CSR is a long term value proposition tool for a brand and how, unlike selling strategies, it's not limited to a single purchase. H2- Different CSR practices create different customer perception about the brand thus having different levels of impact on the customer loyalty towards the brand. In the present scenario, when the customers are more willing to know the brands' social engagement, customers have their selective preferences for CSR efforts too. Some of such efforts are called the priority efforts and are considered more realistic than the others. No matter if two companies are employing same amount of the funds in the CSR practices, the one with the efforts in the 'priority' area would make a better impact. Besides, different CSR efforts earn the brand a different title. Some activities position them as reliable and trustworthy, whereas, some make them called socially active. The categorization of putting the CSR efforts in customer centric areas or employee/shareholders related areas or with the society at large makes the change in the perception of the customers about the company. The hypotheses tests that how differently people think about different CSR practices and what different impact do they create on customers' purchasing decision.

H3- The customers have the scope of categorizing CSR practices as 'Social responsibility' or 'Social obligation' and thus make their brand perception accordingly. The customers may not always take CSR practices as a positive effort of a company. Some customers are of the view that contributing to the societal development is the duty of any brand who is taking resources from the society. The term 'responsibility' is replaced by 'obligation' and is treated as the requirement of the brand by such customers. They do not make their brand choices on the basis of the fact if the company is responsible or not. Further, when India has made it mandatory for every company to contribute to CSR, it would be tough to analyse if a company is actually volunteering contribution or is bound by the law to do so. It will also generate competition when all the brands would be using the same value-proposition tool on the same floor. The hypotheses testifies if the customer loyalty is affected by their perception of a brand of being socially responsible or merely fulfilling obligation.

H4- The choice of communication channels has a major impact on the awareness level of the customers about the brand's social initiatives.

The communication channels play a major role in framing the image of the brand. It is widely seen that most of the customers are not aware of the CSR initiatives or efforts of those brands who have been contributing to the society through such activities since long. The brands were either not marketing their efforts or were choosing a wrong platform to access the public to market their efforts. The hypothesis testifies the comparative impact of using the different communication channels to communicate CSR efforts.

H5- Innovative CSR practices help the organization to gain more advantage as compared to the traditional practices.

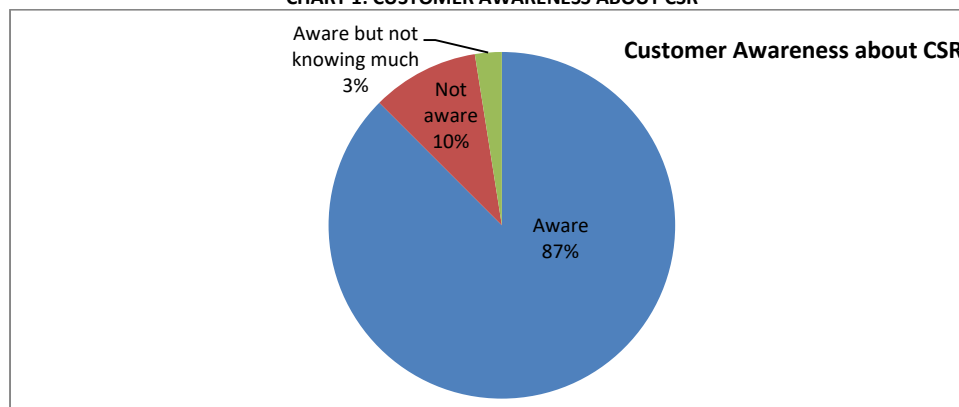
The companies practicing CSR are not limited to philanthropic CSR but are evolving new ways to have the 'two in one' effect. They, on one hand are fulfilling their social obligations and on the other hand, they are retaining the existing customers by positioning themselves as the 'caring brand'. In the present scenario when CSR practices are being made mandatory, in order to use CSR as positioning tool, the brands would have to find innovative ways to get noticed. The brands are required to find out the key areas they should put their efforts in. In order to get more connected to the world, they are required to develop practices which suit their brand specifically and position them rightly. The hypothesis is tested to find out testifies the new and innovative ideas to attract the customers through CSR initiatives.

ANALYSIS

The responses were taken from a sample of 40 respondents. The respondents were sampled through simple random sampling. The major segment of the sample respondents lies in the age group of 21-35 years, although different age-groups didn't show any significant difference in their responses. The responses were then coded and tabulated. The codes were then analysed on the basis of the percentage responses for each code. The analysis is given below-

Q. 1 Do you keep yourself aware about how responsible a company is towards the society?

CHART 1: CUSTOMER AWARENESS ABOUT CSR

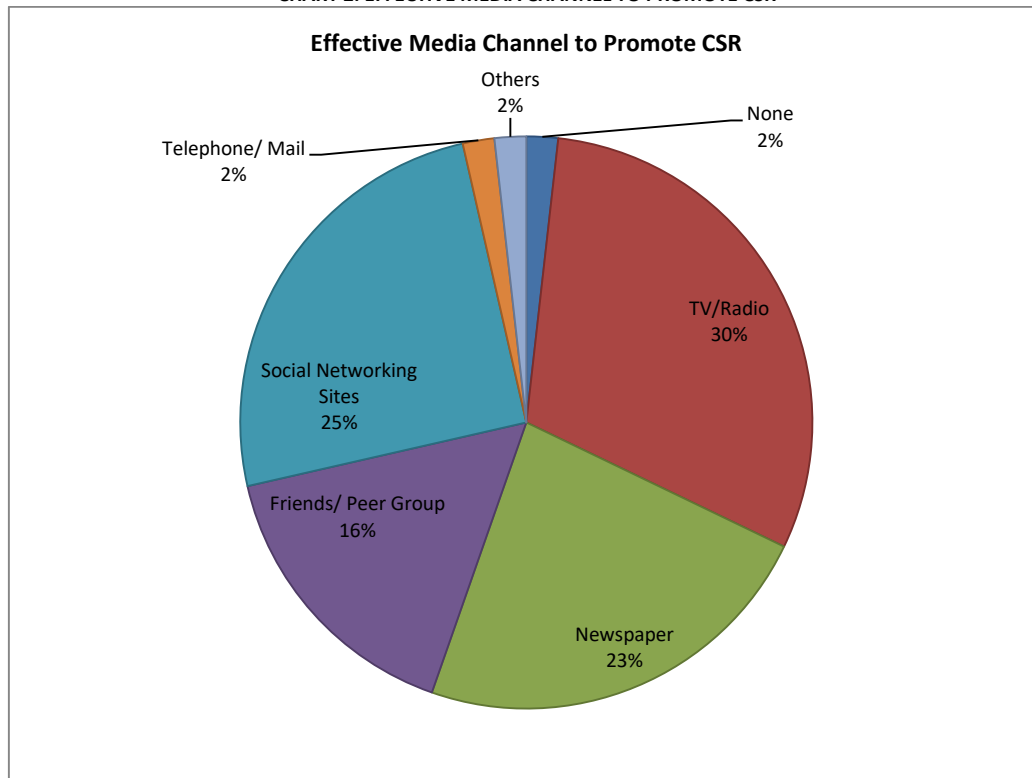


Out of 40 respondents, a big segment of 87% customers have responded positively while rest 13% is either not aware or don't bother about it.

Q.2 Through what media you get aware of company's social contributions?

- Television/ radio
- Newspapers
- Friends/ Peer Group
- Social Networking
- Telephone/ Mail
- Others

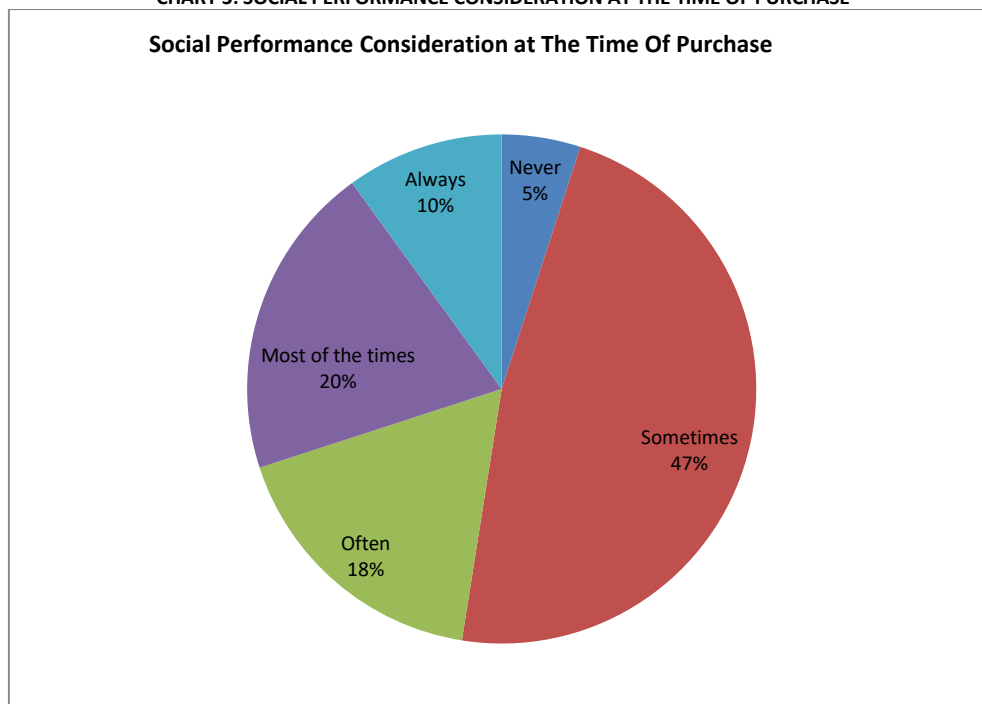
CHART 2: EFFECTIVE MEDIA CHANNEL TO PROMOTE CSR



The effective media channels having almost equal level of spreading awareness are Television, Social Networking sites, Newspaper and Word of mouth communication through Friends/ Peer group whereas TV advertisements were proven to be the best communicator. The companies are required to keep the customers aware through developing E-mail/ Telephonic Communication. The reason why the Email and telephonic medium are not as successful as others is that the customers do not pay much attention to promotional emails and telephonic calls unless the message has some unique feature in itself.

Q. 3 While making purchase decisions, how often do you consider the fact if a company is socially active or not?

CHART 3: SOCIAL PERFORMANCE CONSIDERATION AT THE TIME OF PURCHASE

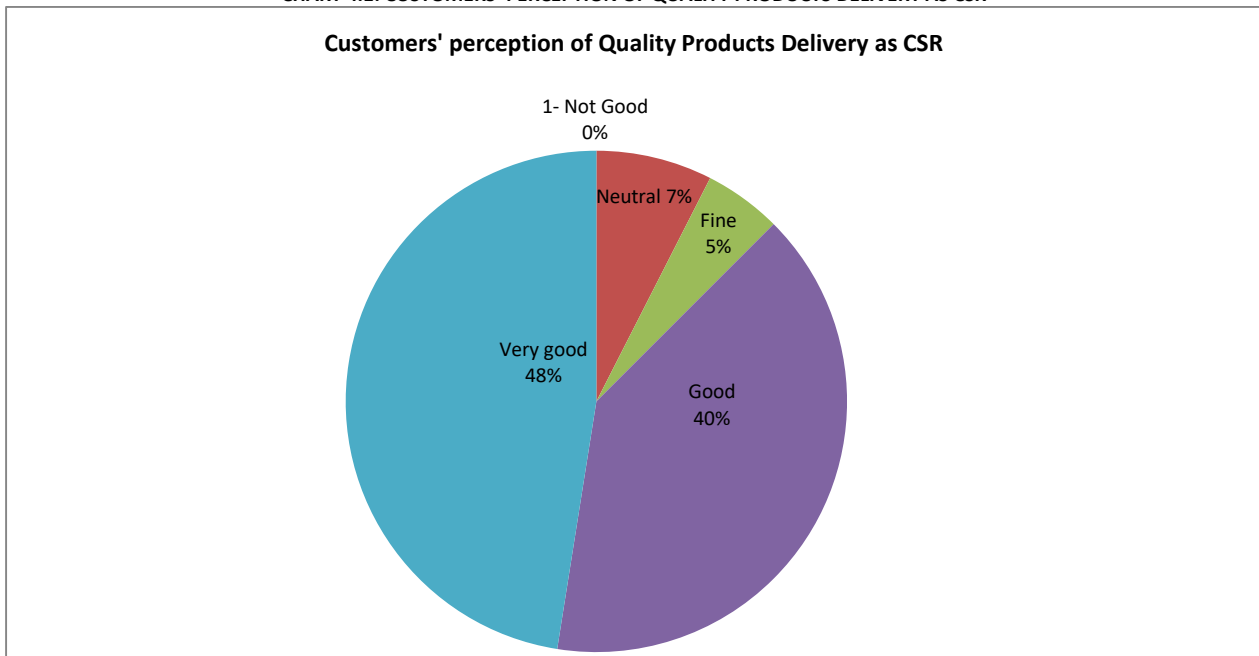


Only 10% respondents treated social responsibility as the priority check and consider the social involvement of the brand while making purchase decisions. A large segment of 47% respondents do not take it as the priority but if they are duly informed, they do consider it.

Q.4 How would you rate the brands/organizations on the basis of following social activities?

a) The brand/organization is committed towards its customers and delivers quality products

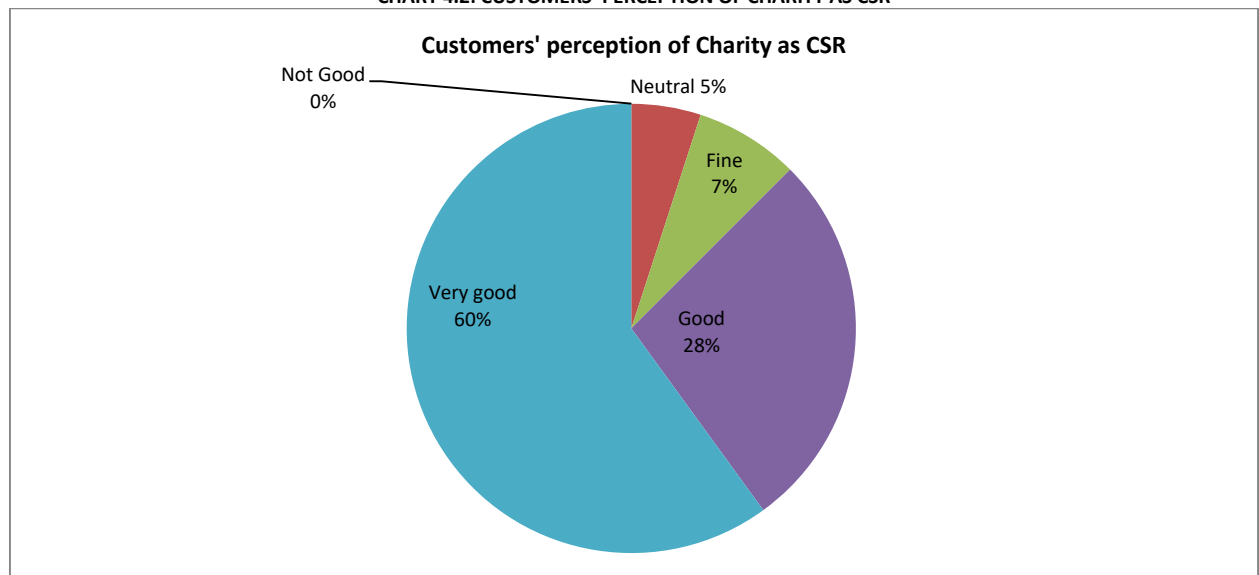
CHART 4.1: CUSTOMERS' PERCEPTION OF QUALITY PRODUCTS DELIVERY AS CSR



The assurance that a particular brand would deliver quality products is one of the most affective reasons of product repurchase or Brand loyalty. 88% customers consider it as the priority basis for being loyal to a brand. Out of 88% customers, 48% were of the view that if a brand is delivering quality, the brand is categorized as 'very good' and rest 40% considered it as an important basis to analyse the brand equity and categorized such brands as 'Good' in terms of performance.

b) The brand/organization donates a part of its profit to the weaker sections/needier areas of the society-

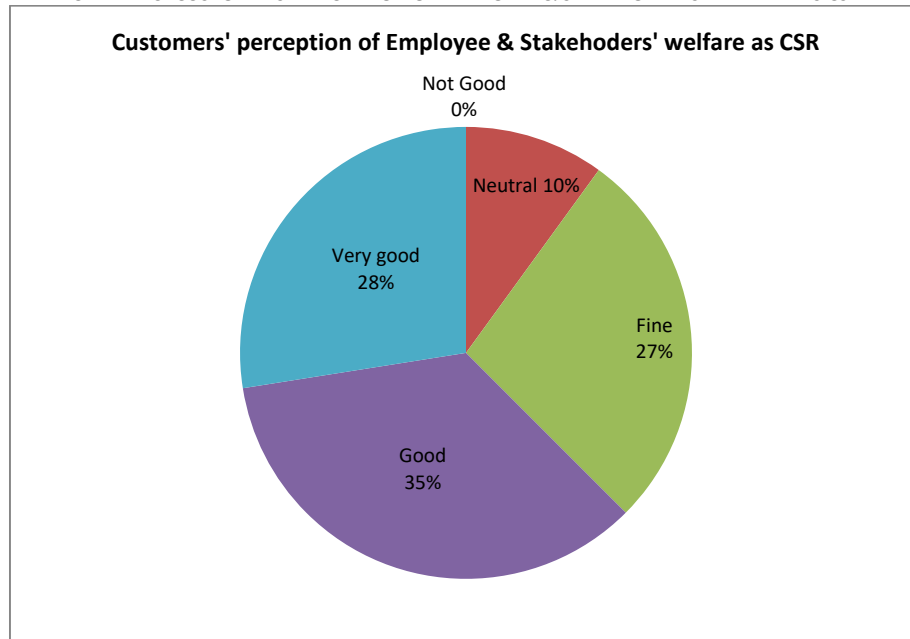
CHART 4.2: CUSTOMERS' PERCEPTION OF CHARITY AS CSR



Donating funds through charity to the needy areas /weaker sections of the society by the companies/organizations has been in practice since long. A mass population still prefers this method of CSR over other methods. While 60% of the respondents have categorized such organizations (who contribute to the needy/weaker sections of the society) as 'very good' and 28% as 'good', it is shown that a big segment favors the method.

c) The brand/organization ensures the welfare of its stakeholders/ employees

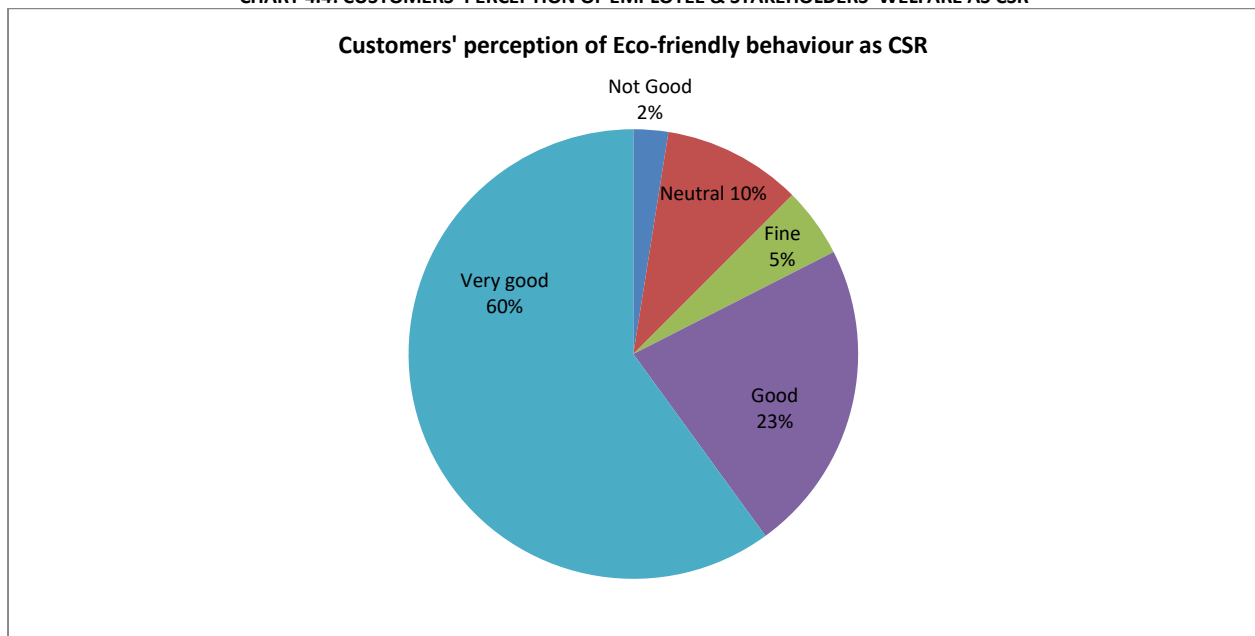
CHART 4.3: CUSTOMERS' PERCEPTION OF EMPLOYEE & STAKEHOLDERS' WELFARE AS CSR



The idea is not very much appreciated by the customers. Only 28% respondents consider it as a needed effort while 35% respondents were of the view that if a company is doing so, it will be categorized as a good company. A relatively large segment of 37% respondents were either neutral or had no signification consideration for it. The reason of this ignorance can be that the customers do not treat the shareholders /employees of the company as the part of their society but the part of the company. Hence, from their point of view, if a brand is doing any such welfare, they are not favoring the society but themselves.

d) The brand/organization is socially responsible and takes care of preventing social/environmental hazards like Pollution Control and Eco-friendly behavior

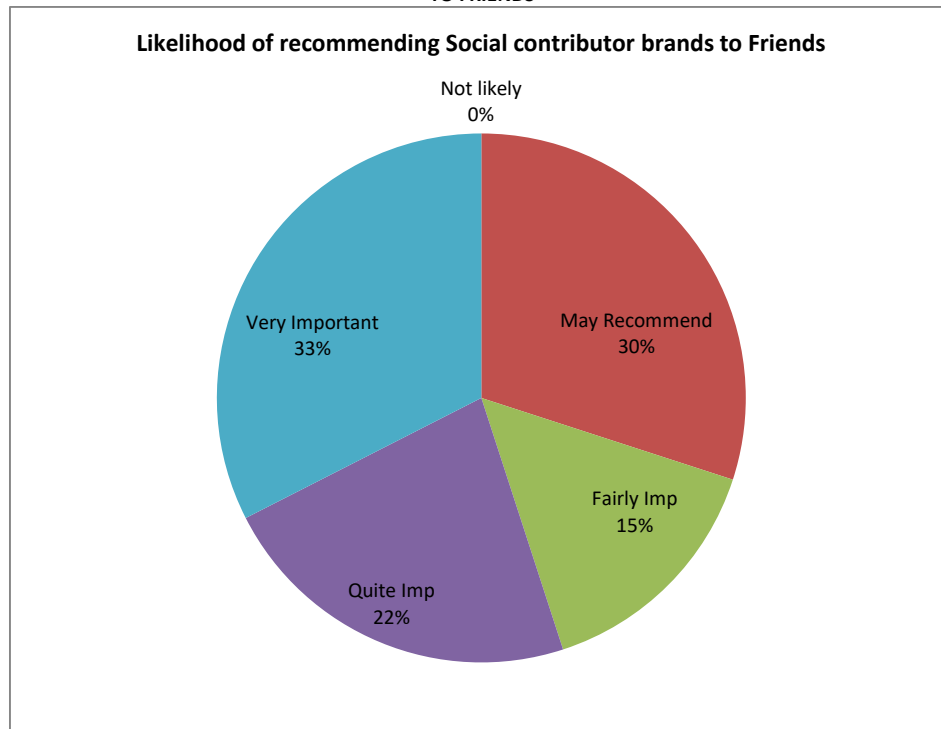
CHART 4.4: CUSTOMERS' PERCEPTION OF EMPLOYEE & STAKEHOLDERS' WELFARE AS CSR



60% of the respondents were taking the environment protection efforts by the brands/companies as a sign of very responsible company while 23% too consider it as one of the important areas to employ your funds in. 5% have a positive feeling while 10% were neutral considering no significant effect of the effort. 2% respondents had the view that putting money into this segment is not attractive at all.

5. How likely it is that you recommend socially responsible brands to your friend?

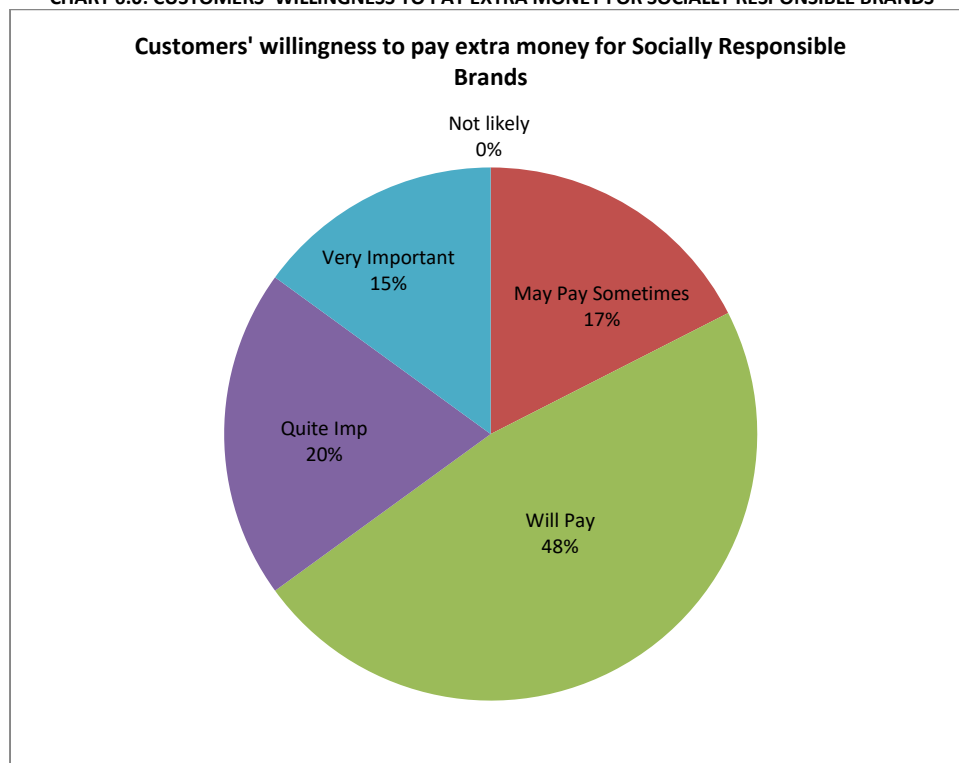
CHART 5.0: CUSTOMERS' PERCEPTION OF EMPLOYEE & STAKEHOLDERS' WELFARE AS CSR LIKELIHOOD OF RECOMMENDING SOCIAL CONTRIBUTOR BRANDS TO FRIENDS



A mixture response was recorded for the importance of considering the recommendation of social contributor brands to the fellows. Although none of the respondents were of the view that they don't recommend such brands. While 33% considered it as very important, 22% too had a strong likelihood of recommending it and considered it quite important. Rest 30% have not taken it as important but would like to consider it sometimes.

6. Would you like to pay a little extra amount for a product which contributes its profit share to the societal development?

CHART 6.0: CUSTOMERS' WILLINGNESS TO PAY EXTRA MONEY FOR SOCIALLY RESPONSIBLE BRANDS

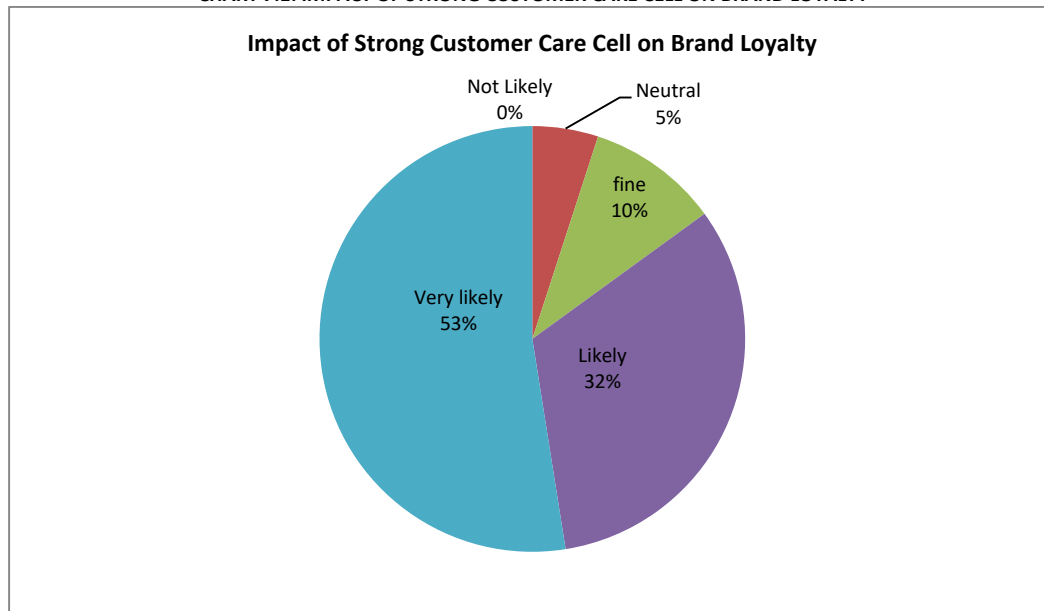


Almost half of the no. of respondents (48%) were ready to pay extra for socially responsible brands. 15% of the respondents took it as very important and 15% considered it as important provided if brands have a transparent methodology. 17% of the respondents could allow to lose their pockets sometimes for the reason.

7. Rate the advanced social activities that make you more loyal for a company/ brand-

a) The brand/organization has a strong customer care cell and solves most of the issues-

CHART 7.1: IMPACT OF STRONG CUSTOMER CARE CELL ON BRAND LOYALTY



53% respondents think that if a brand maintains a strong customer care cell, it is perceived as a very good brand, 32% have the opinion of it being a good brand. For 10% of the respondents it is not that important a feature for a brand being very good, though creates a positive impact. For 5% respondents, it has a neutral effect.

b) The brand/organization emphasizes on quality of products and services-

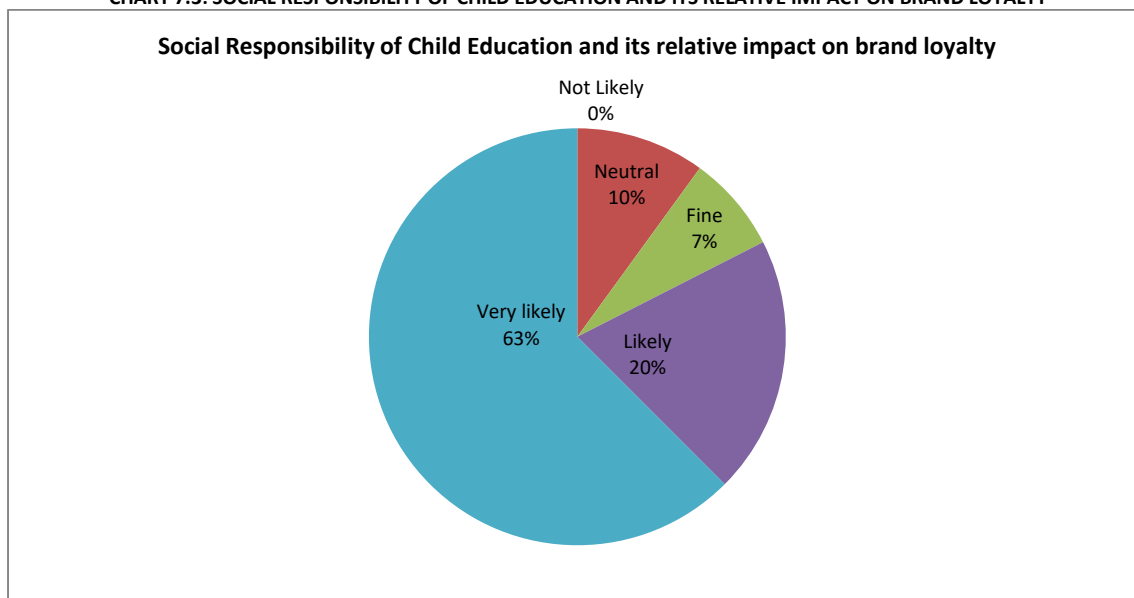
CHART 7.2: IMPACT OF GOOD QUALITY PRODUCT ON BRAND LOYALTY



Indian customers are considered to be price sensitive. Still a big segment of our society prefer quality over price. Brands with good quality products like Myntra, Dell, etc. are preferred by more than 80% shoppers. 60% respondents consider such brands as very good ones, 28% as good and 10% as fine. 2% respondents do not consider this feature as effective. For them, quality comes with higher price. Hence, an average quality product will go better.

c) The brand/organization is participating actively in child education and its promotion-

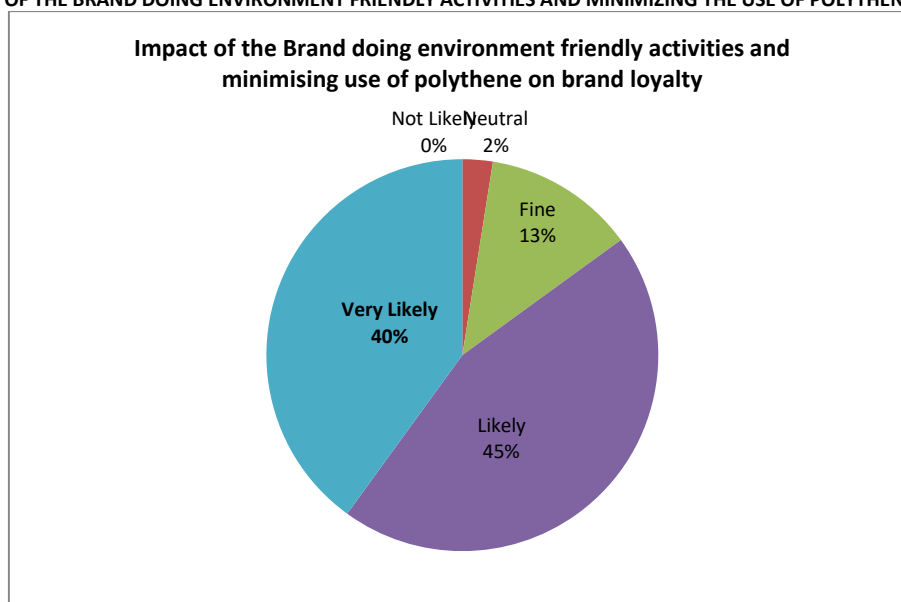
CHART 7.3: SOCIAL RESPONSIBILITY OF CHILD EDUCATION AND ITS RELATIVE IMPACT ON BRAND LOYALTY



63% are very likely to be a loyal customer of a brand which is contributing to poor child education or is assisting or promoting the idea. 20% lie on a comparatively low point on the scale yet belong to the category of likely prospects. It's fine for 7% of the respondents to stick loyal to such a brand while 10% of the respondents have a neutral impact.

d) The brand/organization is practicing on being environment friendly by minimizing the use of polythene-

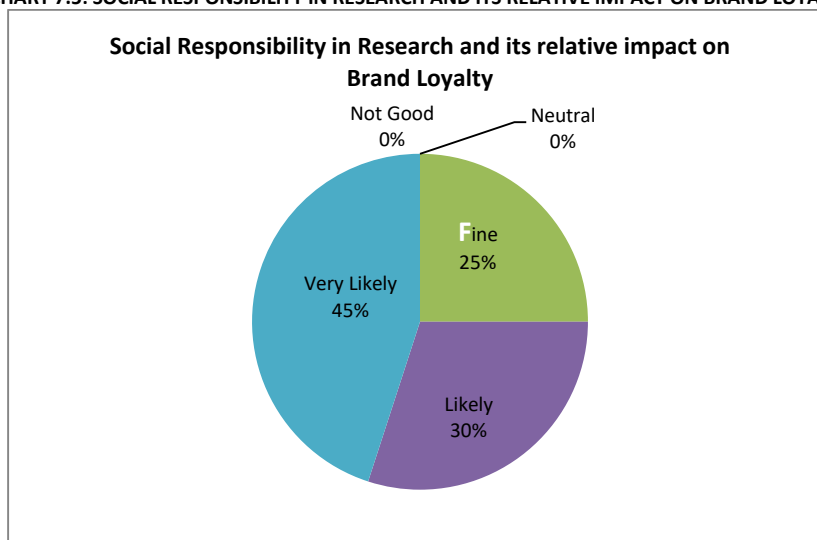
CHART 7.4: IMPACT OF THE BRAND DOING ENVIRONMENT FRIENDLY ACTIVITIES AND MINIMIZING THE USE OF POLYTHENE ON BRAND LOYALTY



Ban on polythene has been made mandatory in India recently. Most of the customers are aware of the negative impact of its use on the environment. While 40% respondents ranked it as very important factor for increasing brand loyalty, 45% as important, a big segment of more than 45% respondents were in favour. Although 13% respondents were just fine with the idea and 2% were neutral.

e) The brand/organization is spending a significant part of its profit on research activities to innovate more eco-friendly methods (Like solar energy use) for the development of the society-

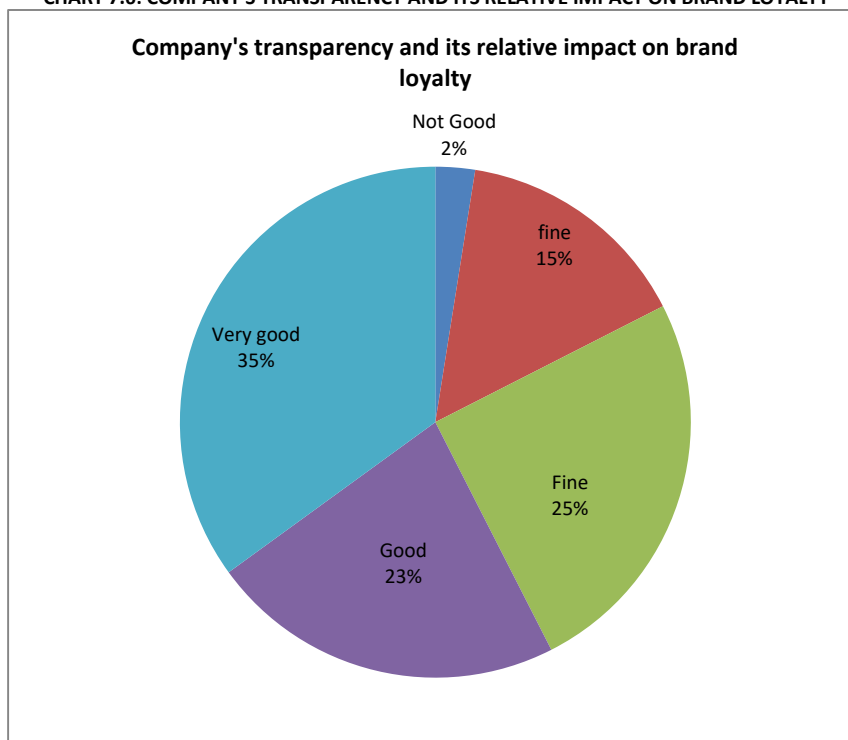
CHART 7.5: SOCIAL RESPONSIBILITY IN RESEARCH AND ITS RELATIVE IMPACT ON BRAND LOYALTY



The Indian customers know the importance of research. While none of the respondents have neutral or negative viewpoint for the effort made by the brands of doing CSR through doing research developing environment conservation methods, 45% treated it as very important factor for creating brand loyalty, 30% as important and 25% as fine.

f) The brand/organization is transparent in its operations-

CHART 7.6: COMPANY'S TRANSPARENCY AND ITS RELATIVE IMPACT ON BRAND LOYALTY



The idea is not favoured much by the respondents. If a company is transparent in its operations and produce accounts of its operations, it is not very much attractive a method as other CSR methods is. While 35% of the respondents have the viewpoint that it can be very important method for increasing brand loyalty, 23% considered it as important, 25% as fine, 15% were neutral about it. Rest 2% respondents didn't find it attractive at all.

FINDINGS

The analysis can be interpreted as below-

1. The CSR activities have a positive impact on the minds of the customer. Customers are becoming more aware of the social contribution made by the organizations and are considering the fact at the time of purchase, thus making themselves loyal or disloyal to a brand.
2. Different CSR practices create different impact on the minds of the customers. The findings show that while putting CSR funds in poor child education attract the customers more, no such response was made for the brands which invest their CSR efforts for the welfare of their employees/ Stakeholder.
3. The customers have a good sense of socially responsible efforts and can easily differentiate between 'responsible' effort and 'forced' effort. The brands which are faking CSR and are either not doing it or doing it because of the compulsion made by law, are easily identified by the customers. The respondents were of the view that the brands must show their social engagement and should put their efforts in the required areas rather than putting funds in traditional methods just to earn customer loyalty
4. It is very important for a brand to choose the right channel for communicating its CSR activities. The findings show that advertisements through social networking sites and through Television media have been the best channels to communicate the CSR activities to the mass public. As most of the aware shoppers lie in the age range of 20-45 years, it is easy to spread awareness to these customers through Facebook, Twitter and blogspot. Besides, the entertainment channels & reality shows are the other targets where we can target the customers easily.

5. The findings show that innovative practices attract more customers rather than traditional ones. Strengthening customer care cell, Quality assurance, Reliability of not being cheated by the brand, Using Eco-friendly methods in its processes attract customers rather than traditional CSR through donating money to a needy segment.
6. The study shows that the customers do not show much interest in recommending such brands to their fellows.

RECOMMENDATIONS

1. The practice of using customer-centric approach in CSR creates the direct and immediate effect on the minds of the customers as they experience it. The companies should position themselves as customer-friendly by developing their customer care and improving customer experience.
2. Customers do not always recommend brands to fellows unless the brand is actually focusing on quality. Hence, the brands need to provide benefits to the customers for each recommendation.
3. The brands should focus on choosing the right communication channels. As the customers are usually not very interested in reading a pamphlet while hanging around with friends with family or at the time of shopping, they should be informed on social networking sites where there are more chances of a customer going through a written content. They can be targeted on TV entertainment or sports or news channels.
4. CSR is not only important but a very effective way to attract the customers. Brands are required to keep innovating newer practices in order to keep the charm. Some innovative strategies are as follows-
 - i. In order to make the customers ready to pay extra for the CSR activities, the extra amount shouldn't be added to the price of the product. Now-a-days when companies are offering bonus points to their existing customers, the extra amount for CSR activities should be charged from this amount asking the customers if they are ready to pay a part of their bonus points for social contribution. Customers will feel no burden allowing the brands to do so as they do not own that money. They would feel privileged instead having donated money for the noble cause. An additional advantage of the strategy is its three in one effect- 1- The brand is generating funds from the customers' account. 2- The brand is communicating its social efforts to the customers through direct communication over messaging or e-mail. 3- The brand is satisfying the 'transparency' requirement of the customers and making them convinced that the brand is actually contributing funds to social dearth.
 - ii. Employing CSR funds in environment conservation projects and communicating it through advertisements.
 - iii. Donate money to a particular/specific needy section and shoot your advertisement with the group instead of giving money to an actor/performer to promote your brand. The Customer connects more with the ordinary man. Increasing popularity of reality TV shows clearly depicts that customers prefers realistic approach now-a-days and the method is never lasting.
 - iv. Keep CSR efforts transparent. When a brand promotes itself by assuring donation to the weaker/ poor sections of the society, customers do not generally believe the fact for the reason that there exist many such fraudulent projectors. In order to differentiate one's brand from others and to convince the customers, transparency in CSR activities must be maintained.
 - v. Enhancing customer experience through assistance cell
 - vi. Adopt green marketing. If the brand actually shows its social concern in its activities, the effort creates the double impact and gives the customer a realistic feeling.

CONCLUSION

The study concludes that CSR is the only value-proposition that makes the customer feel connected to the brand and motivates him to make a repurchase. In a country like India, where a lot of development is required, any brand which is helping the government by sharing its burden of developing the country, it automatically occupies a soft corner in the minds of the customers. It does generate a positive image of the brand and if the brands put a little effort in maintaining its reliability in terms of quality and assistance, it earns the loyalty of the customers. Every brand needs to develop its innovative CSR practices according to its targeted customer segment. The customers are more conscious about the environmental and social issues now-a-days. Any effort made by the brands make them associated with the brand. Hence, by adopting some of the aforesaid measures and by educating customers about such programs, a brand can generate life-time loyalty of the customers for itself. Through this value-proposition strategy, the brand can survive in adverse market conditions.

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FARMER PRODUCER COMPANY MODEL AS FARM TO MARKET LINKAGE: LEARNING AND CASES FROM CHHATTISGARH

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ABSTRACT

The women former make a Self-help Groups (SHGs), they purchase cocoon of the Government cocoon bank and sale the thread of cocoon bank, cocoon bank sale of the cocoons to SHGs and private cocoon trader. Reelers are sale the thread to cocoon bank, they purchase the thread and sale the thread trader, Government is providing facilities to reeling machine and working infrastructures. Kanker District in durgkondal block is working with Self-Help Groups in 13 villages, with 117 women in group. They are starting of tussar farming in forest area, there are more host plant available in this area. Farmers are farming own land and Government forest.

KEYWORDS

SHGs group formation, women employment.

INTRODUCTION

Agriculture sector looks like a greener pasture to major corporate houses in recent times particularly with government regulations in favour of corporate houses to be in contract terms with farmers.

Consumers as well are changing preference for shopping from mom and pop stores to supermarkets, malls, and food parlours.

The grass has not always been greener on the other side though as from 1995-2005 almost a half lakh farmers committed suicide across the country. These two dramatically different scenarios force us to think why is it that capital is moving into agriculture and farmers are desperate to get out of it? Answer to farmers' distress lies in the fact that majority of value addition in agriculture commodities happen only after production and hence a meager chunk of that huge investment coming in towards agriculture sector. Currently what proves to be working as solution of this problem?

Farmer's producer companies have been enabled through 2002 amendment to the companies Act so that they do not face the political pulls and pressures which cooperatives are subjected to. Like cooperatives, they have the one- member-one vote rule, but unlike them, there is no provision for veto-wielding government representation on the board. This is supposed to assure their autonomy.

There are 445 FPCs in the country, with Tamil Nadu leading at 51, Madhya Pradesh with 48 and Telangana with 40. The Delhi-based Small Farmer agribusiness Consortium sponsors them with matching grants of equity and credit guarantees without collateral-up to a certain limit.

TABLE 1: STATE- WISE DISTRIBUTION OF PCS BY DATE OF REGISTRATION

S. No.	State	Total agri. PCs	Regd. Before/in 2008	Regd. In 2009 or 2010
1	Delhi	3	1	2
2	Punjab	6	2	4
3	Rajasthan	6	1	5
4	UP	1	1	0
5	Uttarakhand	3	2	1
6	And. & Nicobar	1	0	1
7	Andhra Pradesh	6	0	6
8	Karnataka	3	1	2
9	Kerala	3	0	3
10	Tamil Nadu	11	3	8
11	Assam	4	2	2
12	Bihar	4	2	2
13	Jharkhand	3	2	1
14	Meghalaya	2	2	0
15	Mizoram	8	8	0
16	Orissa	6	1	5
17	Chhattisgarh	1	0	1
18	Goa	1	1	0
19	Gujarat	8	3	5
20	MP	27	19	8
21	Maharashtra	20	5	15
	Total	127	56	71

Source: MCA list from NABARD: ASA, Bhopal

FARMERS PRODUCER ORGANIZATIONS: DEVELOPMENT SO FAR

Vrutti is an organization that has been working on developing Farmer Producer Organizations (FPOs) for the last four years. Vrutti works with over 45 FPOs of which 25 are under direct implementation and 20 FPOs are being developed in partnership with other NGOs. Vrutti has been providing support to variety of organizations in different domains and geographies in transforming community based organizations and producer organization into sustainable institutions. Vrutti built on the experiences expertise and tools to transform FPOs (source Vrutti.org.)

SCENARIO IN CHHATTISGARH

In the state three FPOs have been formed by Revitalizing Agriculture Extension System through Agri. Enterprise Facilitation Center (AEFC) in Kanker District, supported by World Bank under Development of Market place for 18 months. Currently 3000 farmers are associated with it.

The innovation delivers an increase in net returns of a small holder producer from agriculture and other enterprises to the tune Rs.15000 per acer Per annum. This is achieved by considering agriculture as an enterprise and making the farmer an entrepreneur, and moving from improvements in productivity to improvements in returns of FARMING households. The innovation creates an ecosystem of knowledge and support services that increase agriculture productivity, reduce Risks, and increase incomes and net returns.

TABLE 2: NAME OF THE PRODUCER ORGANIZATION AND THEIR PRODUCE IN KANKER DISTRICT (CHHATTISGARH)

S.No.	Name of the Producer Organization	Producer/Crop Dealt by PO	District
1	Mahanadi Farmer Producer Organization.	Animal husbandry services and Agriculture.	Kanker
2	Devari Village Bio-Pesticide Unit	Bio-Pesticides	Kanker
3	Gadhiya Farmer Producer Company Limited	Animal Production and Allied	Kanker
4	Self-help Groups and Cooperative Samity	Tussar Cocoon Production and Reeling.	Kanker

REVIEW OF LITERATURE

In the year 2014-15 NABARD alone reported 21471 thousand rupees of expenditure for promotion of FPOs, a 17.1% increase over 2013-14. A total of 302 FPOs are registered in India out of which highest are in Andhra Pradesh (49) followed by Madhya Pradesh (34). Number of FPOs are not reported precisely as many of them are yet to be registered under the Indian Companies Act others are in the process.

NABARD set up a Producer Organisation Development Fund with a corpus of Rs. 50 crore from its surpluses in the year 2011. So far, NABARD has supported 91 POs of different forms by extending credit facility of Rs.205 crore and Rs. 6.30 crore towards accompanying measures for capacity building/ market interventions. Not only there is a dire need of seed capital but it has also been observed by promoter organizations such as NGOs, NABARD etc. that significant capacity building and handholding is required before the POs attain organizational, financial and commercial sustainability.

Farmer producer companies in India came into existence as legal entity after necessary modification of the Indian Companies act (1956) by adding section 9A in the year 2003. Farmers' producer companies can be seen as hybrids between private companies and cooperative societies. The producer-company concept is aimed to combine the efficiency of a company with the 'spirit' of traditional cooperatives (Trebbin & Hassler, 2012).

The concept of 'Cooperative' is one of the options available for the producers to organize themselves to move up in the supply-chain by value addition and business ownership. However, the cooperative system in the country has been infected by several inadequacies (Sontakki, 2012). The Indian farmer is connected to the Indian consumer through various supply chains, each of which has evolved over time. The first and oldest model, the APMC supply chain, is one wherein the crop is sold to traders at the local agricultural market called a mandi (Prasad, 2013).

NEED/IMPORTANCE OF THE STUDY

Study focuses on women employment opportunities and forest area conservation through tussar farming and increasing disposable income of the tribal areas formers by increasing economies of scale through joint liability groups and working for common goals.

STATEMENT OF THE PROBLEM

Literacy level of artisans is poor, there is high need to train them every year because technologies are improving day by day. main problems like nursery preparation and plants), high disease and pest infestation, lack of DFL (Disease Free Layer), Low Hatching percentage, transportation and Markets were all the more reasons which were constraining this concept of market linkage to flourish.

OBJECTIVES

1. To study the cost of cultivation of tussar forming.
2. To study the SHGs group formation and employment

RESEARCH METHODOLOGY

The study was conducted in 13 villages of Kanker District (Chhattisgarh) in this villages 117 women making self-help groups(SHG). They are starting of tussar farming in forest area, there are more no. of host plants available in this area. Farmers are farming own land and Government forest. Structured questionnaire and focused group discussion was used as tool to collect the data and simple statistical procedures were followed to analyze it as it was an exploratory study.

RESULT AND DISCUSSION**SUCCESS STORIES: A CASE OF SAHBHAGI SAMAJSEWI SANSTHA**

Kanker District in durgkondal block is working Self-Help Groups (SHGs) in 13 villages, with 117 women in group. They are starting of tussar farming in forest area, there are multiple host plants available in these area. Farmers are farming own land and Government forest. They are earning additional income from tussar farming with agriculture as a part time. In one season (60-65 Days) of tussar cocoon farming they earn Rs. 4953 or more. (100 DFL farming) And 115 women farmers are doing part time or full time work in reeling charama block in village babukohaka. One woman is doing reeling work in a day an average 100-150 gm from the cocoon. And she can earn Rs.150-200.

FIG. 1: TUSSAR COCOON PRODUCTION IN KANKER DISTRICT (in %)

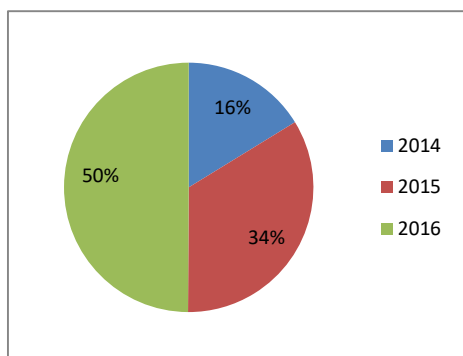
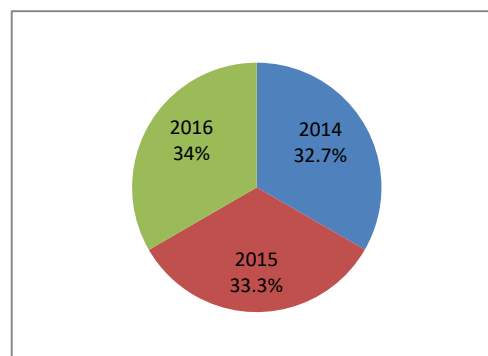


FIG. 2: THREAD PRODUCTION IN (Kg)

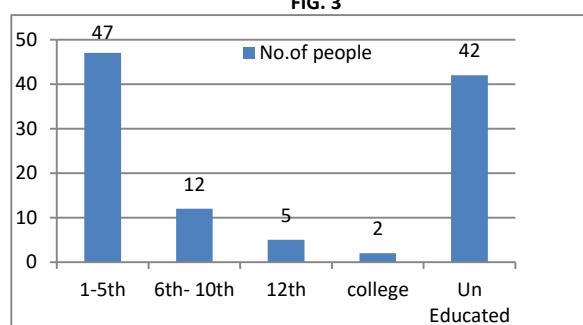


Every year, the production of tussar in increasing in the district of kanker. It was 32.7% in 2014. As the awareness increased in tussar producers, the production also increased which became 33.3% in 2015 and the production has been 34% till now in 2016. So, there are possibilities that cocoon production might increase in further years. Production of tussar threads has been increasing every year in district kanker because training is imparted not only for tussar farming but also for reeling. It was 16% in 2014 which increased to 34% in 2015 and 50% till now in 2016

Sahbhagi Samajsewi Sanstha (NGO) through **MKSP** makes Women groups in 13 Villages of 18 groups. The groups are called TVS (Tussar Vikas Samity), each group has minimum 18 and maximum 41 members. They are Basic seed rearers.

EDUCATION LEVEL

FIG. 3



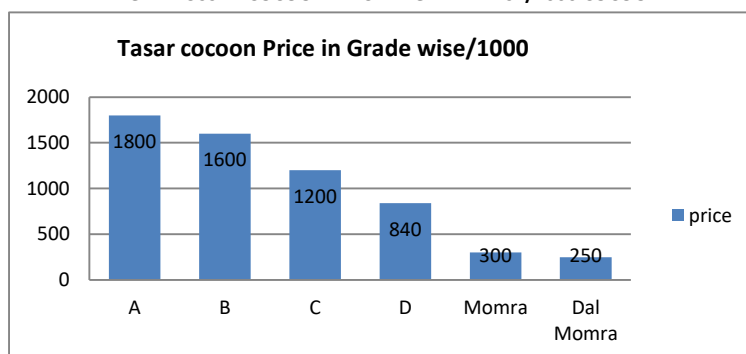
The education levels of tussar farming women (61%) women is as follows- 47 Women were 1st-5th passed, whereas 42 never went to school.

WORKING MODEL

Kanker District in Durgkondal Block working the women Self-help Groups (SHGs) in these groups are creating in 13 villages, including 117 members, they are starting to Tussar cocoon farming in these areas, there areas forest has more no. of host plans. After the cocoon production they are selling of cocoon FPO (Farmer Producer Organization) and Government Cocoon Bank.

The women formers make a Self-help Groups (SHGs) 115 women in these Groups, they had been purchasing of cocoon, of the Government cocoon bank and sale the thread of cocoon bank, cocoon bank sale of the cocoons to SHGs and private cocoon trader, Reelers are sale the thread to cocoon bank, they were purchasing the thread and sale to the thread traders, Government is providing the facilities of reeling machines and working infrastructure.

FIG. 4: TUSSAR COCOON PRICE IN GRADE WISE/1000 COCOON



Cocoon Farmers sell the cocoon to the Government cocoon bank in following prices per 1000 cocoon. A grade cocoon Rs. 1800, B grade Rs. 1600, C grade Rs. 1200, D grade Rs. 840, Momra Rs. 300 and Dal Momra Rs. 250.

TABLE 3: COST OF CULTIVATION TUSSAR COCOON FARMING

S.No.	Work/ Product description	No. of day/product one day	Wage/price	Total
1	Preparation of chauki garden	One day	150	150
2	Ten day's monitoring day 3 time (one hour one time)	30 h. 3 day 6 hour	150	562
3	DFL (Disease free laying)	100 DFL	12/DFL	1200
4	Lime	20kg	12/Kg	240
5	Bleaching powder	2kg	80/Kg	160
6	Small silk worm transfer to host plant	1day	150	150
7	Monitoring to silk worm in host plant open field	3day	150	562
8	Jiwan sudha(300gm)		300	300
9	Dusting	1day	150	150
10	Lime turmeric bleaching powder	-	42	42
11	Harvesting	2 day	150	300
12	Nylon net	1		400
13	Sceketier	1		41
	Total input			4257
	Total Output	6119 Cocoon	Grade vice	9210

BC Ratio = Total Output /Total Input

$$9210 / 4257 = 2.16$$

As evident, the BC Ratio of the model comes out to be 2.16 which ensure a promising part time business or additional income source along with their main business (Agriculture).

FIG. 5: DETERMINATION OF PRICE

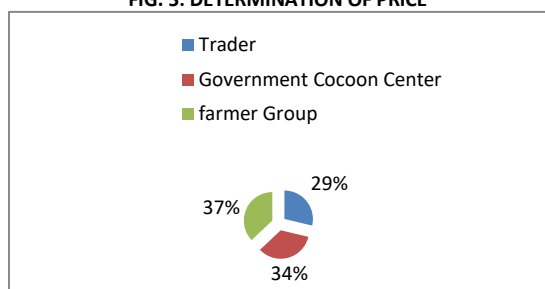
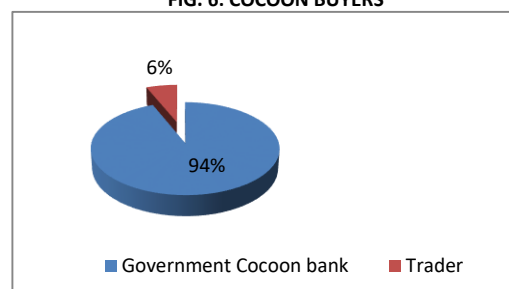


FIG. 6: COCOON BUYERS



Tussar cocoon farmer sell 29% of their produce to trader, 34% to Government cocoon center, and 37 % sold it to other farmer groups who reel the thread. The prices of cocoon are fixed by government cocoon bank for 92% of cocoons and price of the rest 6 % cocoons are decided by trader.

FIG. 7: CAPACITY OF REELING IN A DAY

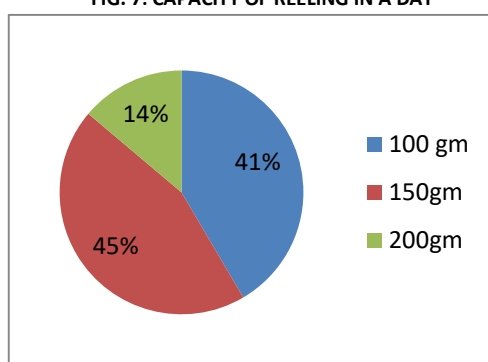
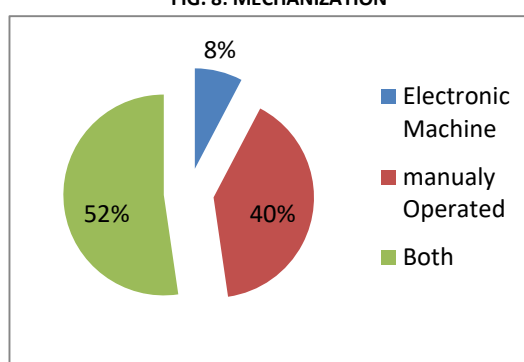


FIG. 8: MECHANIZATION



In Babukohkah village of charama block 41% women reelers reel 100 gram, 45% women reel 150 gram and 14 % women reel 200 gram of thread per day. 8% women of babukohkah village use electronic machine for reeling purpose, while 40% women use manually operated machines and 52% uses both the machines.

RECOMMENDATIONS/SUGGESTIONS

- Tussar farmer should be training from time to time and field visits should be arranged for progressive farmer.
- A trained person should be in the field who can inspect the field 2-3 time in a week.
- Arrangement of essential inputs for tussar farming.
- To arrange for DFL or for DFL production a training center for a grainage center should be established.
- To establish a cocoon collection center and to regulate market.
- Arrange of machines and cocoon for farmer preparing the reeling.
- Farmers should be given training in cloth weaving and loan can be need to them during this period.
- Development of the market of silk clothes and Government should advertise and encourage these from time to time.

FINDINGS/CONCLUSIONS

Literacy label of former is poor, need to training every year because technologies are improving day to day. There are main problems is chauki garden (nursery preparation and plants), more No. in natural predator and parasites, lack of DFL (Disease Free Layer), Low Hatching percentage, transportation and Markets. Despite of all the bottlenecks. The FPO model of silk reeling presently promises sustainable income with a benefit cost ratio of 2.16:1 which other -wise they wouldn't be able to get through traditional agricultural practices owing to their lack of competitiveness. However, in future more such producer cost will be there in the region which will further reduce their profitability? It would be then this model will be tested to its limits & Right Policy interventions might be needed.

LIMITATIONS

Since the Study area was limited to one FPO at block level and one commodity was explored, further aspects of value chain and market access, working capital management could not be explored.

SCOPE FOR FURTHER RESEARCH

This study explored the marketing opportunities, value chain and value addition. Though study area in the state has huge potential for this concept to be developed. Future descriptive studies in areas of Economic development in Small and medium entrepreneurs, working capital management of producer companies, market access etc. could be carried out.

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IMPACT OF LEADERSHIP QUALITIES OF EMPLOYEES IN CORPORATE HOSPITALS IN CHENNAI

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ABSTRACT

The employees of the corporate hospitals expresses that the Leadership in management is achieved through the participative leadership which helps the organization to improve its production. They perceived that the work commitment is the primary aim of employees to acquire Leadership. The enlightened motivation is increased with the help of dynamic supportive and instrumental leadership among the employees.

KEYWORDS

leadership qualities, corporate hospitals in Chennai.

INTRODUCTION

Leadership requires many things, but the most important is service to others. The combination of competencies, characteristics, traits and methods of each style will yield an effective leadership mode capable of driving quality management and sustaining long-term evolution in the organization. Leaders responsible for managing today's healthcare organizations are exposed to the needs of clients, and the limitations and demands of the organizations that they must serve. Antonaros (2010) argue that leadership is about the skills, abilities, behaviour, and knowledge necessary for the success of quality initiatives, which is significant given the number of organizations striving to weave quality programs into their overall strategic orientation. According to Bass and Avolio (1994), the turbulent healthcare environment shows that it poses challenges and has made management aware of the need for appropriate leadership as healthcare professionals function in an environment of uncertainty, disorder, and ambiguity. The current turbulent environment requires speed, innovation, and flexibility, with which traditional organizational practices are unable to cope with. Suffice it to say, the right leadership in an organization can stimulate a group to articulate innovative ideas. These are known as the "strong forces" of leadership, which can shift the focus from quantity to quality and speed (Bass & Avolio, 1999). Quality and speed can provide an organization with a competitive edge; these two factors can be responsible for the long-term success of an organization. Leadership can facilitate qualitative change by changing associates' viewpoints. Hence, leadership style influences the quality environment.

Organizational commitment is the attitudinal component to increase organizational effectiveness. In addition to several variables, the quality of hospital services is also determined by the commitment given by the employee. This signifies that the indication of the achievement of optimal external services if the climate has been created to serve one another among fellow employees. Climate of mutual service is largely determined by the rules of ethics and values prevailing among the employees, the employee's ability to serve, as well as the leadership style of employees (Mayfield and Mayfield, 2002). Similarly, Dabholkar et al. (2000) identify personal attention and comfort as provided by a provider's employees as components of service quality.

The leaders must practice effective leadership to succeed in today's challenging climate and to balance these competing demands. Greenleaf (1977) argued that true leadership is essentially synonymous with service and great leaders are identified by the service they perform for individuals and society. Leadership behaviour appears to be what healthcare organizations need to effectively lead their organizations in today's challenging times. Additionally, (Love et al., 2008) says health care organizations are increasingly concerned with looking beyond financial performance measures, while focusing on how to deliver higher quality care.

LITERATURE REVIEW

Leadership is a social influence process in which the leader seeks the voluntary participation of subordinates in an effort to reach organization goals. A leader can be defined as a person who delegates or influencing others to act so as to carry out specified objectives. Today's organizations need effective leaders who understand the complexities of the rapidly changing global environment. If the task is highly structured and the leader has good relationship with the employees, effectiveness will be high on the part of the employees.

Smith (1996), Defined organizational commitment as the measure of strength of the employee's identification with, involvement in, the goals and values of the organization."

However, Anderson et al. pointed out that in Deming's management method, the basic premise is creating an organizational system that fosters quality management practices implementation including customer focus, continuous improvement, and teamwork, which all require effective leadership.

Leaders must have the ability to realize formulated vision by managing quality elements to transform the firm into using quality managerial practices (Idris & Ali, 2008).

According to Allen and Meyer (1990), organizational commitment has three components, namely affective commitment, continuance commitment, and normative commitment. Affective commitment implies employees' emotional attachment to the organization. Continuance commitment refers to employees' feelings of obligation to remain with the organization. Normative commitment is based on the costs that employees would have to incur if they decided to leave the organization.

Netemeyer, Maxham, and Pullig (2005) found leadership to motivate the employee to go above and beyond the basic requirements of the job responsibilities in their interaction with customers in corporate hospitals.

According to Waterman (2011) Leadership is characterized by the mantra of putting other people first. Adopting this caring, empathic attitude should not only be displayed towards patients and customers but also should be applied in the work place and surrounding community (Waterman, 2011).

Podsakoff et al said that leadership behaviour can affect trust and satisfaction of employees to organization and organizational citizenship behaviour further enhances the relationship between leadership style and organizational commitment directly.

Similar the result of (Chen, 2004) says that the relationship style between nursing faculties' perceptions of nursing deans' and directors' leadership style and faculties' job satisfaction level in Taiwan. (Chen, 2004) found that Taiwanese nursing deans and directors tend to display transformational leadership more frequently than transactional leadership.

The work of (Kleinman, 2004a), Kleinman (2004) indicated that there was a significant relationship between the leadership behaviors of nurse administration and staff nurse job satisfaction and retention. Many health care administrators are increasingly showing concern for delivering high quality care in which both the customer (patients) and providers (employees) are satisfied while maintaining a strong financial environment (Love et al., 2008). The New approaches to continuous improvement in health sectors that rely on highly developed "people management." New thinking about leadership is helping to change and shift thinking about a range of contemporary leadership approaches and methods.

GAPS IN THE LITERATURE

After reviewing national and international literature pertaining to leadership qualities of employees in various organizations, it is found two important gaps are yet to be fulfilled.

1. The factors responsible for the leadership for employee in corporate hospitals.

2. The impacts of leadership on employee commitment as well as their performance are still unaddressed at national and international levels therefore the present research aim's at fulfilling the above mention research gap.

OBJECTIVES IN STUDY

The major objectives in research are presented as fellows.

1. To study the predominant factors of leadership qualities among employees in corporate hospitals.
2. To measure the influence of leadership qualities on the effectiveness on organisation.

HYPOTHESIS

The factors of the leadership qualities do not differ significantly.

METHODOLOGY

The study is based on both primary and secondary data. The primary data is collected on structured questioner with optional type question as well as statement in likert's 5 point scale.

DATA COLLECTION

The researcher applied convenient sampling method to collect the responses from employees of corporate hospitals. The researchers consider top five corporate hospitals in Chennai city for data collection purpose. The researcher circulated 40 each in all the five corporate hospitals and able to obtain 168 responses with completed responses. After scrutinising 14 of the questioner are fill with flaws hence the researcher rejects those responses and consider remaining 154 responses for the research. Hence the sample size of research is 154.

DATA ANALYSIS

After entering the coding of the questioner the researcher analysis using both univariate and multivariate statistical techniques.

1. Factor analysis
2. F-Test
3. T-Test
4. KMO-Bartlett Test

ANALYSIS AND DISCUSSION

The employees in corporate hospitals are requested to express their participation in management through Leadership at the point of inception. Their responses are obtained in Likert's 5 point scale which range from strongly agree to strongly disagree. 10 statements have been posed on them to obtain responses suitable for Leadership. Factor analysis, the principal component method is applied and the following results are obtained.

TABLE 1: KMO AND BARTLETT'S TEST FOR LEADERSHIP IN MANAGEMENT

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	Approx. Chi-Square	.806
	df	697.830
	Sig.	.000

Source: Computed Data

From the table 1 it is formed that Kaiser – Mayer – Olkin measure of sampling adequacy is .806, Bartlett's test of sphericity and Chi-Square value is 697.830 are statistically significant. This shows that the employees Leadership in management obtained from 500 samples is significantly explaining the data reduction process through Factor analysis. The following table gives the number of factors deduced into 2 predominant factors.

TABLE 2: KMO AND BARTLETT'S TEST FOR LEADERSHIP IN MANAGEMENT & TOTAL VARIANCE EXPLAINED

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.988	29.879	29.879	2.988	29.879	29.879	2.276	22.762	22.762
2	1.163	11.628	41.508	1.163	11.628	41.508	1.875	18.746	41.508
3	.915	9.145	50.653	1.012	10.124	51.632	1.156	10.124	51.508
4	.907	9.070	59.723						
5	.808	8.079	67.802						
6	.755	7.551	75.353						
7	.733	7.333	82.687						
8	.678	6.778	89.464						
9	.551	5.508	94.973						
10	.503	5.027	100.000						

Extraction Method: Principal Component Analysis.

Source : Computed data

From the above table it is found that the two Eigen values 2.276 and 1.875, along with individual variances 22.762 and 18.746. The total variance explained by the 10 variables of Leadership in management about Leadership is 41.508 which is statistically significant. The two factors deduced so far are loaded with certain number of variables as shown in the table below

TABLE 3: KMO AND BARTLETT'S TEST FOR LEADERSHIP IN MANAGEMENT& ROTATED COMPONENT MATRIX (A)

	Component		
	1	2	3
LSF 9	.661		
LSF 3	.624		
LSF 7	.588		
LSF 5	.573		
LSF 6	.551		
LSF 10		.748	
LSF 8		.630	
LSF 2		.587	
LSF 4		.491	
LSF 1			.780
LSF 13			.692
LSF 12			.664
LSF 11			.663

Source: Computed data

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

A Rotation converged in 3 iterations.

From the above table it is found that the first factor consists of 5 variables namely

I make dynamic decisions in my capacity (.661)
I listen to my subordinates before taking decisions (.624)
I give chances for my subordinates to share their views (.588)
I share my organizational problems with my subordinates / colleagues (.573)
I discuss with employees on job assignments (.551)

Therefore, the first factor is named '**Participative Leadership**'

The second factor consist of 4 variables namely

I help my colleagues to make working on their task more pleasant (.748)
Personal welfare of group members is very important for me (.630)
Efforts are taken by the top level management to create conducive work environment (.587)
Rational approach is found among the employees (.491)

Therefore, the second factor is named '**Supportive leadership**'

It is also found that the third factor comprises four crucial variables with factor loadings

Employees are given schedules to accomplish to job assigned (.780)
They are able to understand what is realistic in accomplishing the tasks (.692)
Lifelong learning process supports us to acquire knowledge (.664)
Top level come down to any level to solve problems (.663)

Now it is suitable to call this factor "**Instrumental Leadership**"

FINDINGS AND CONCLUSION

The employees of the corporate hospitals expresses that the Leadership in management is achieved through the participative leadership which helps the organization to improve its production. They perceived that the work commitment is the primary aim of employees to acquire Leadership. The enlightened motivation is increased with the help of dynamic supportive and instrumental leadership among the employees.

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