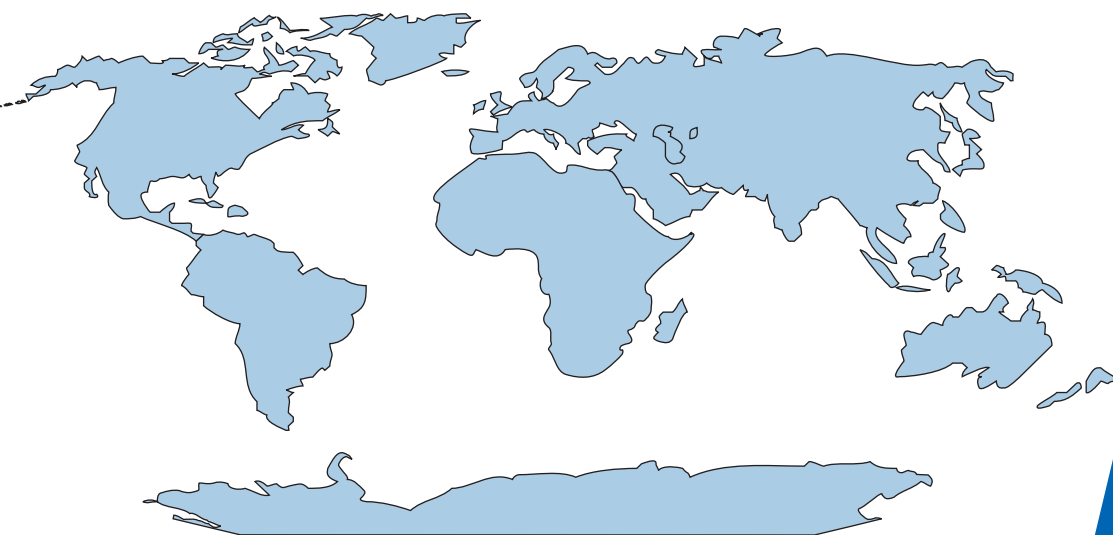


# **INTERNATIONAL JOURNAL OF RESEARCH IN MANAGEMENT & SOCIAL SCIENCE**



# International Journal of Research in Management & Social Science

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Volume 2 , Issue 2 ( III ) : April - June 2014

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## A COMPARATIVE ANALYSIS OF INDIA'S TRADE WITH BANGLADESH AND OTHER SAARC COUNTRIES

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### ABSTRACT

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**Research Background** -In 1985 India with other six south Asian countries- formed SAARC by means of trade creation and trade diversion. India plays a lead role in SAARC(1985) trade and always has a favourable trade balance. The purpose of this paper is to explore the comparative position of India's trade with Bangladesh and other SAARC countries for the last ten years. It aims to find out the prospects and challenges of India's trade with Bangladesh and other SAARC countries.

**Methodology** – Research into India's trade with SAARC are reviewed and the prospects and challenges are also analyzed. Part one of this paper discloses the comparative trade scenario of India with Bangladesh and other SAARC countries, while the second part analyzed the prospects and challenges for further expansion.

**Major Findings And Conclusions** – Bangladesh is the largest trading partner of India in SAARC region. For countries like Bangladesh and India though there are several problems like over population, depletion of natural resources etc., there is always a possibility of substantial expansion of trade between them. Cooperation, comparative advantages and phased Tariff Liberalization Programme (TLP) can boost up the trade between them to the optimum level.

**Key Words**- Bangladesh, India, Saarc, Trade

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### PART-1: COMPARATIVE TRADE SCENARIO OF INDIA WITH BANGLADESH AND OTHER SAARC COUNTRIES

With the formation of European Common Market (ECM-1958), Regional Economic Groupings (REGs) explores a choice to the region to act both as a producer and as a consumer and to remove trade barriers among the member countries. At present there are 28 regional groupings (source-GATT report, 1993) in the world. In 1985 India with other six south Asian countries-Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka and Maldives-also joins the rally with the main objective to improve the welfare of the region by means of trade creation and trade diversion - formed SAARC (South Asian Association for Regional Cooperation). SAARC is dedicated to economic, technological, social, and cultural development and emphasizing collective self-reliance. Afghanistan joined the organization in 2007. With Preferential Trading Arrangement, which is the minimization of barriers to import identified product from one country to another, the SAARC with the largest populated economic grouping is now in a way to become a free trade area and formed SAFTA (South Asia Free Trade Area) in 2008. SAARC countries are not equal in size or stages of economic development but equal in terms of geographical proximity, historical experiences and the ties of language, art and culture make them closer to each other than any member countries of any regional organisation. Among the SAARC countries, Bangladesh which has a long historical and political relation with India and a part of Indian subcontinent is the largest trading partner of India in this regional organisation.

With the Liberalisation, Globalisation and New Economic Policy (1991), India has gradually become an emerging country in respect of world economy. All these reflect India's inclusion in G-20 which is an extension of G-8 of developed countries. Though SAARC accounted for a very little amount of India's total trade (only 5.72%)(source- DGCI&S, 2010-2011), trading with SAARC countries has become important as India's exports and imports with SAARC have been increasing consistently. India plays a lead role in SAARC and always enjoys a favourable trade balance. The following table depicts India's trade with SAARC for the last ten years-

**Table-1 INDIA'S TRADE WITH SAARC FROM 2003-2004 TO 2012-2013**  
(value in US million \$)

Year	Exports	Growth (%)	Imports	Growth (%)	Trade Balance	Growth (%)	Total Trade	Growth (%)
2003-2004	4150.91	-	669.26	-	3481.65	-	4820.17	-
2004-2005	4606.12	10.96	997.19	49	3608.93	3.66	5603.31	16.24
2005-2006	5547.65	20.18	1413.31	41.73	4134.34	14.56	6960.78	24.22
2006-2007	6471.43	16.65	1507.03	6.63	4964.4	20.07	7978.46	14.62
2007-2008	9637.77	48.93	2117.35	41	7520.42	51.49	11755.12	47.34
2008-2009	8561.11	-11.18	1817.89	-14.14	6743.22	-10.46	10379	-11.71
2009-2010	8390.68	-1.99	1657.33	-8.83	6733.65	-0.14	10048.01	-3.18
2010-2011	12878.81	53.48	2173.37	31.13	10705.44	58.98	15052.18	49.8
2011-2012	13033.04	1.19	2498.45	14.95	10534.59	-1.5	15531.49	3.08
2012-2013*	11537.54	-11.01	2166.86	-13.27	9370.68	-11.04	13704.4	-11.76
<b>Total</b>	<b>84815.1</b>		<b>17018</b>		<b>67797.3</b>		<b>101833</b>	

Source:MoEA, \*provisional (Ap12-Jan13)

The table shows that the exports are always higher than imports and thus results in favourable trade balance. The exports grows from US \$ 4150.91 million in the year 2003-2004 to US \$ 11537.54 in the year 2012-2013, showing a growth of 177.95% which is significantly very high. Again the imports shows an increase of growth of 223.76% from the year 2003-2004 to the year 2012-2013. But there was a fall of exports and imports during 2008-2009 and 2009-2010 comparing with the previous years. Immediate recovery starts in 2010-2011 showing a growth of 53.48% in export and 31.13% in import. This trend continued for the next two financial years. 2012-2013 (Ap12-Jan13) has shown that the export becomes US \$ 11537.54 million and import US \$ 2166.86 million (source-MoEA). Chart-1 shows the trend analysis of India's trade in terms of export and import with SAARC for the last ten years-

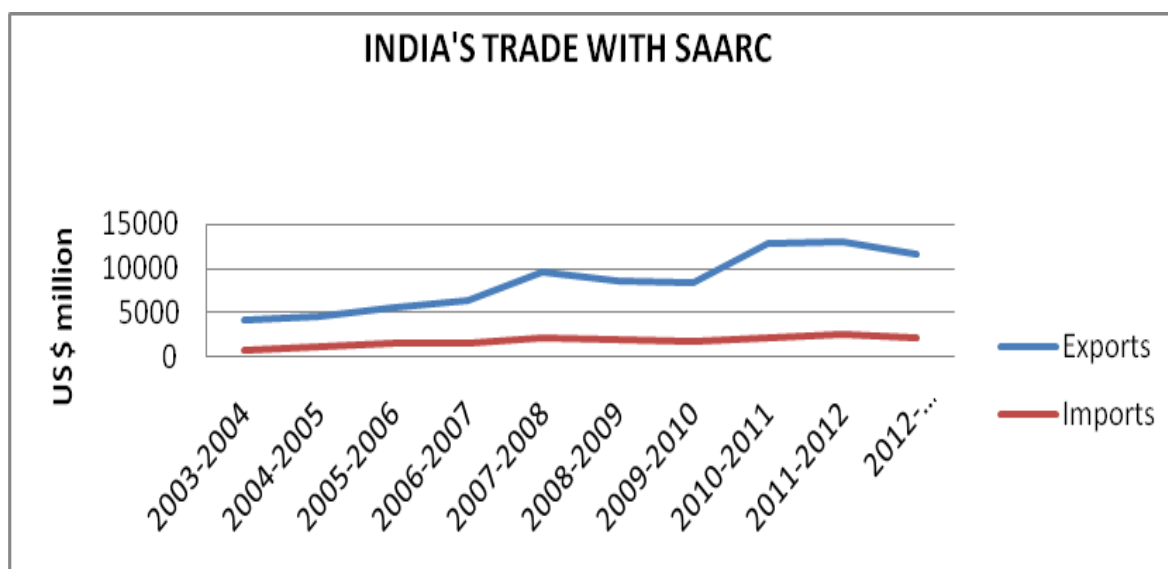


Chart-1\*2012-2013 provisional (Ap-jan)

By comparing the values of 2003-2004 with 2012-2013, the growth rate of trade balance is 169.14%, which is very high. India's trade balance followed the same negative trend in 2008-2009 and in 2009-2010 as they reflect the result of negative growth rate in export and import. Total trade followed the same trend. Following chart shows the trend of India's trade balance and total trade with SAARC-

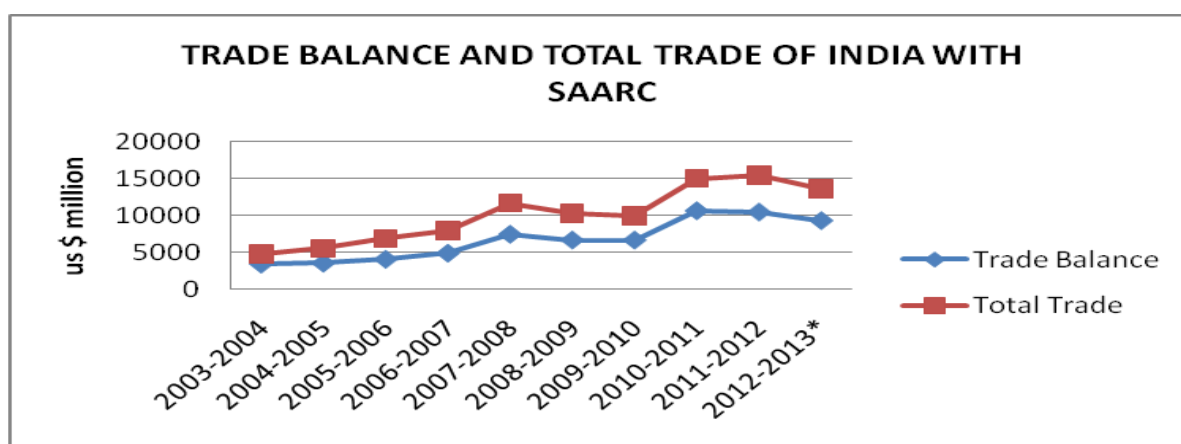


Chart-2\*2012-2013 provisional (Ap-jan)

The trading relationship between India and Bangladesh is currently of special interest in both countries for a number of reasons. Among the SAARC countries Bangladesh is one of the largest export markets for Indian trade. The bilateral trade between the two nations is carried out as per guidelines given in the Bangladesh Trade Agreement which provides beneficial arrangement for the use of waterways, railways and roadways passage of goods between two places in one country through the territory of the other. Finally, both countries have long shared common objectives for closer economic integration within the South Asia region. Therefore a comparative analysis is required to ascertain the trade relation between India-Bangladesh and India-other SAARC countries. The following table compares India's trade with Bangladesh and other SAARC countries.

**Table-2 INDIA'S TRADE WITH BANGLADESH AND OTHER SAARC COUNTRIES FROM 2003-2004 TO 2012-2013 (value in US million \$)**

Year	Trade With Bangladesh				Trade With Other SAARC Countries			
	Exports	Imports	Trade Balance	Total Trade	Exports	Imports	Trade Balance	Total Trade
2003-2004	1299.02	78	1221.02	1377.02	2851.89	591.26	2260.63	3521.15
2004-2005	1631.12	59.37	1571.75	1690.49	2975	937.82	2037.18	3912.82
2005-2006	1664.36	127.03	1537.33	2934.66	3883.29	1286.28	2597.01	4026.12
2006-2007	1629.57	228	1401.57	1857.57	4841.86	1279.03	3562.83	6120.89
2007-2008	2923.72	257.02	2666.7	3180.74	6714.05	1860.33	4853.72	8574.38
2008-2009	2497.87	313.11	2184.76	2810.98	6063.24	1504.78	4558.46	7568.02
2009-2010	2433.77	254.66	2179.11	2688.43	5956.91	1402.67	4554.54	7359.58
2010-2011	3606.4	446.75	3159.65	4053.15	9272.41	1726.62	7545.79	10999.03
2011-2012	3757.91	585.38	3172.53	4343.29	9275.13	1913.07	7362.06	11188.2
2012-2013*	4055.15	490.66	3564.49	4545.81	7482.39	1676.2	5806.19	9158.59
<b>total</b>	<b>25498.89</b>	<b>2839.98</b>	<b>22658.91</b>	<b>29404.14</b>	<b>59316.17</b>	<b>14178.06</b>	<b>45138.41</b>	<b>72428.78</b>

Source:MoEA, \*provisional (Ap12-Jan13)

The above table shows that India's exports to Bangladesh as well as imports from the country increased in a significant amount. From US \$ 1299.02 in 2003-2004, it increased to US \$ 4055.15 in 2012-2013 (Ap12—Jan13), which indicates a growth of 212.16%. Comparing to the exports of other SAARC countries, India accounted for 162.36% growth rate. Thus it revealed that the growth rate of India's export is higher in case of Bangladesh than other SAARC countries. Again the imports from Bangladesh has increased from US \$78 million in 2003-2004 to US \$ 490.66 million in 2012-2013 (up to Jan13), which means a growth of 390.66%. On the other hand India's growth rate of imports with other SAARC countries stood as 183.49% as imports increased from US \$ 591.26 million in 2003-2004 to US \$ 1676.2 million in 2012-2013 (up to Jan13). It indicates that India's trade relation with Bangladesh has got a new dimension. Chart-3 and Chart-4 shows India's exports and imports with Bangladesh and other SAARC countries for the last 10 years respectively.

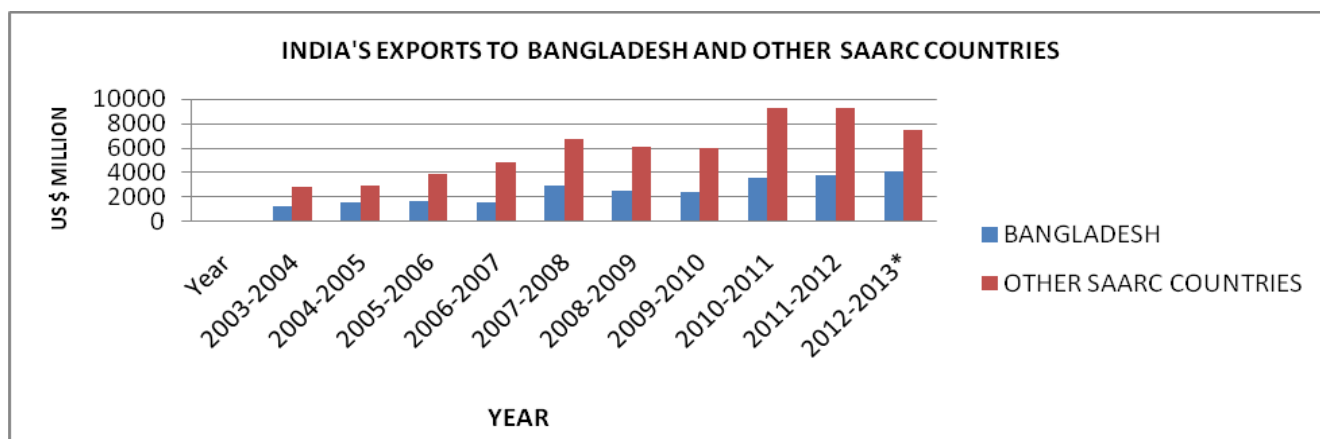


Chart-3\*2012-2013 provisional (Ap-Jan)

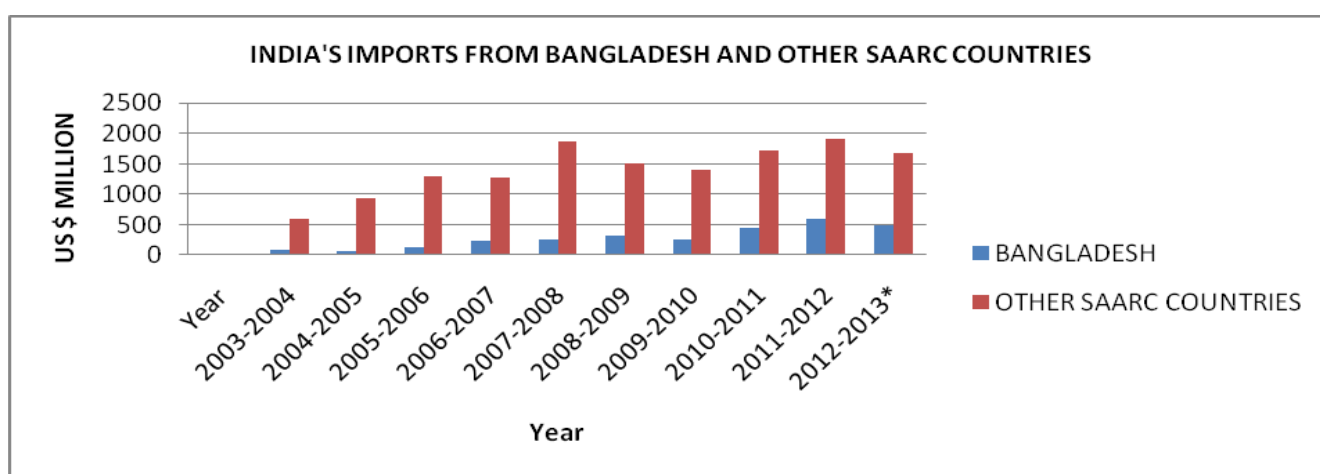


Chart-4\*2012-2013 provisional (Ap-jan)

Comparing to the trade balance with India, Bangladesh solely accounted for a half amount of other SAARC countries trade balance. In case of total trade with India, there is a sharp increasing trend for both Bangladesh and other SAARC countries. It can be noted that growth in export is much higher than the imports, with the result the trade balance is rising continuously. The growth rate in trade balance with India and Bangladesh is 192.00% as trade balance increased from US \$ 1221.02 million in 2003-2004 to US \$ 3564.49 million in 2012-2013 (up to Jan 13). The growth of trade balance of other SAARC countries stood as 156.86% which is again smaller than the trade balance with Bangladesh. Following chart- depicts India's trade balance with Bangladesh and other SAARC countries.

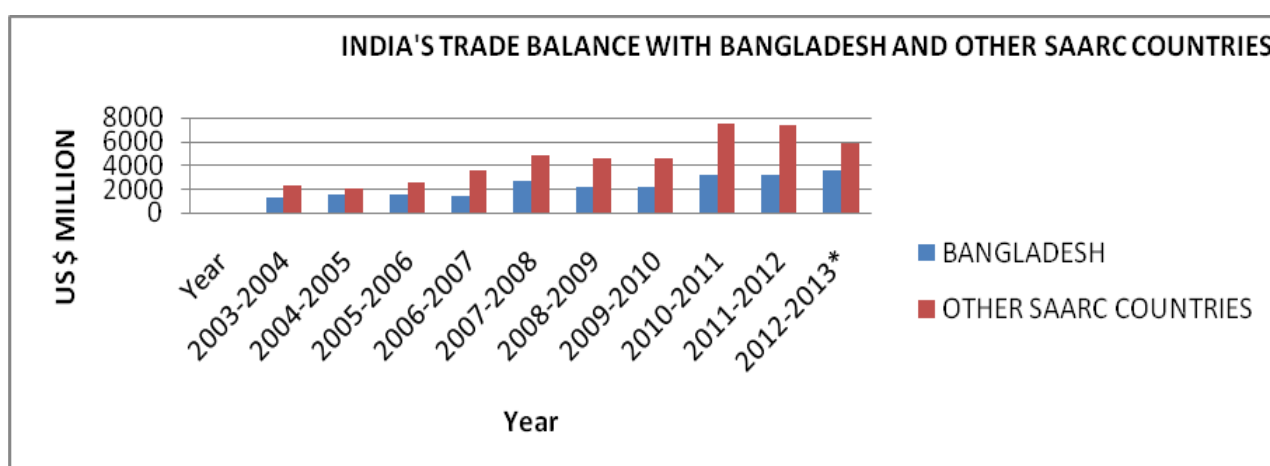




Chart-5\*2012-2013 provisional (Ap-jan)

India's total trade with Bangladesh and other SAARC countries are shown in Chart-6. India's total trade with Bangladesh had a sharp decrease in 2006-2007 but immediate recovery was started in the next year where total trade jumped from US \$ 1857.57 million to US \$ 3180.74 million. For the last three years it shows an increasing trend. The growth rate stood as 230.11% comparing to the growth rate of total trade of other SAARC countries which is 160.10%.

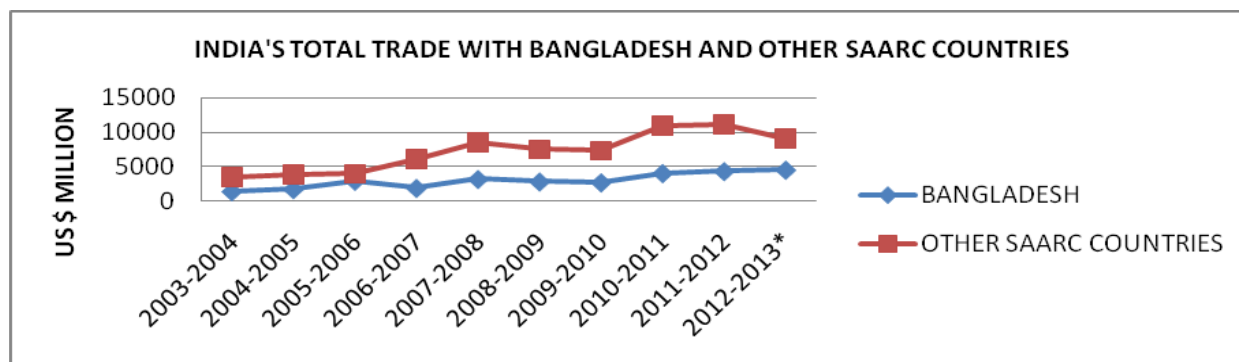


Chart-6\*2012-2013 provisional (Ap-jan)

Following Table shows a comparative analysis of growth rate of India's trade balance and total trade with Bangladesh and other SAARC countries.

**Table-3 GROWTH RATE (%) OF INDIA'S TOTAL TRADE AND TRADE BALANCE WITH BANGLADESH AND OTHER SAARC COUNTRIES**

Year	Growth % of Total Trade		Growth % of Trade Balance	
	BANGLADESH	OTHER SAARC COUNTRIES	BANGLADESH	OTHER SAARC COUNTRIES
2003-2004	-	-	-	-
2004-2005	22.76	11.12	1.47	-9.88
2005-2006	73.59	2.89	1.43	27.48
2006-2007	-36.7	52.02	-8.83	37.18
2007-2008	71.23	40.08	90.26	36.23
2008-2009	-11.62	-11.73	-18.07	-6.08
2009-2010	-4.35	-2.75	-0.25	-0.08
2010-2011	50.76	49.45	44.99	65.67
2011-2012	7.15	1.71	0.40	-2.43
2012-2013*	4.66	-18.14	12.35	-21.13

\*2012-2013 provisional (Ap-jan)

Except the years 2006-2007 and 2009-2010, Bangladesh accounted for higher growth rate % in terms of total trade than other SAARC countries. For Bangladesh Growth % of trade balance shows negative growth rate for three years whereas other SAARC countries show negative trade balance for five financial years. All of the above analysis revealed that India enjoys a comparative advantage of trade with Bangladesh than other SAARC countries and Bangladesh is the largest trading partner of India in SAARC region.

## **PART-2-PROSPECTS AND CHALLENGES OF INDIA'S TRADE WITH BANGLADESH AND OTHER SAARC COUNTRIES**

### **SAARC COUNTRIES OTHER THAN BANGLADESH**

The SAARC was expected to benefit immensely from the historical and cultural ties connecting people across national borders in South Asia and to promote industrial development. There are a number of areas where scope

exists for the industrial development. The King of Nepal, Briendra Bir Bikram Shah Dev had during the speech at the First Inaugural Session of the SAARC Summit in 1985, stated that, “regional cooperation can strengthen the building of a lasting edifice of peaceful co-existence through initiatives and interactions in the fields like the cultural, scientific, technological and economic spheres.”(Source-SAARC-official website).But cooperation in specific sectors at the regional level has not confirmed to the much-preferred receptivity of the positive impulses. The major constraints for the low intra-SAARC trade and high adverse trade deficit of member countries of SAARC with India are-

- Restrictive trade policies, including tariff and non-tariff barriers on quantitative restrictions and discriminatory practices
- Inadequate transport facilities and physical infrastructure
- Trade imbalances
- Over population
- Destruction of natural resources and resource constraint
- Lack of standardization of documentation and complexity of procedures.
- Regionalism vs. multilateralism

Trading relations between SAARC countries are affected by the high level of tariff including quantitative and discriminatory restriction practices. Thus all the SAARC countries are trying to reduce tariff and modifying tariff rates by taking the following measures-.

- They have implemented The SAARC Preferential Trading Arrangement (SAPTA) provided a framework for exchange of tariff concessions and also for liberalization in para-tariff and non-tariff measures with a view to promoting trade and economic cooperation among the SAARC member countries.
- Again The Agreement on South Asian Free Trade Area (SAFTA) was taken during the Twelfth SAARC Summit held at Islamabad in January 2004, prescribes a phased Tariff Liberalization Programme (TLP) according to which all the member states would reduce their tariffs.
- India would allow the LDC countries of SAARC duty free access to its markets (India, Pakistan and Sri Lanka are categorized as Non-Least Developed Contracting States (NLDCSs) and Afghanistan, Bangladesh, Bhutan, Maldives and Nepal are categorized as Least Developed Contracting States (LDCSs).
- India has also reduced its Sensitive List under SAFTA for these countries from 744 items to 480 items
- India has notified tariff reductions to zero per cent for SAARC LDC countries
- Agreement on establishing the SAARC Regional Seed Bank signed during the 17th SAARC Summit meeting will provide regional support to national seed security efforts
- The SAARC Agreement on Trade in Services (SATIS) was signed in the sixteenth SAARC meeting ,2010 at Thimpu in Bhutan to marks the first step in expanding the scope of the SAFTA agreement
- Phase out period for the tariff lines as per SAFTA Ministerial Council (SMC) to be taken out of the Sensitive Lists would be as under.

NLDC to NLDC	3 Year	Tariff Reduction: 0-5%
NLDC to LDC	3 Year	-do-
Sri Lanka	6 Year	-do-
LDC to Contracting States	8 Year	-do-

Base Rate Tariff As on September 2010, source- SAARC-official website)

- So far, four rounds of trade negotiations have been concluded under SAPTA covering over 5000 commodities.

- Removal of discrimination in claiming tax rebates by Indian importers from Nepal on the basis of payment modalities/currencies used for payment of traded goods

Though India has playing a lead role in this forum, a large preferential tariff can eradicate the barriers of trading between India and SAARC. Also a regional development fund can be made.

There are some political issues also. The Kashmir issue or the China's interests to join the SAARC may be likely imbalances India's overbearing presence in SAARC. Thus the prospects and possibilities of trade expansion at the regional level can be possible- only when their existing structure of trade facilities and commodity composition are assessed and analysed. This process in itself helps the region to expand intra – regional trade.

## **BANGLADESH**

Bangladesh has a large trade deficit with India and this is offset by surpluses with other countries like USA or China. 15% of Bangladesh's import comes from India but Bangladesh account for only 1% of India's total imports (source-www.worldbank.org), which is very negligible. Most of the exports from India to Bangladesh are land border trade and from the time of independence informal export has become a serious problem for the countries. So the countries tried to remove these obstacles by adopting the following measures-

- The Bilateral Trade Agreement between India and Bangladesh, renewed from time to time, provides for expansion of trade and economic cooperation, making mutually beneficial arrangement for the use of waterways, railways and roadways, passage of goods between two places in one country through the territory of the other, and exchange of business and trade delegations and consultations to review the working of the Agreement at least once a year.(source-DGCI&S)
- Bangladesh has offered 10% tariff preference in respect of all the products to non-LDCs and to LDCs.
- During the fifth meeting of the Joint Working Group (JWG) on trade between India and Bangladesh, (2007) the two sides had detailed discussion on enhancing bilateral trade and improving trade imbalance of Bangladesh with India.
- A Memorandum of Understanding (MoU) on establishment of Border -Haats at Balamari-Kalaichari and Lauwaghar-Balat at Meghalaya, India –Bangladesh border was signed on 23.10.2010 to trade locally produced vegetables, cottage industry product etc.

The following bilateral documents were also signed during 2011-

- i. Addendum to the MoU between India and Bangladesh to Facilitate, Overland Transit Traffic between Bangladesh and Nepal,
  - ii. MoU on Renewable Energy Cooperation
  - iii. MoU on Conservation of the Sundarban, Protocol on Conservation of the Royal Bengal Tiger of the Sunderban,
  - iv. MoU on Cooperation in the field of Fisheries,
  - v. MoU on Mutual Broadcast of Television Programmes,
  - vi. MoU between Jawaharlal Nehru University and Dhaka University
  - vii. MoU on Academic Cooperation between National Institute of Fashion Technology (NIFT), India and BGMEA Institute of Fashion and Technology (BIFT), Bangladesh
- India is providing Buyers Credit to Bangladesh Government agencies for large project exports, especially in the infrastructure sector such as roads, bridges etc.

Though there are several problems like over population, depletion of natural resources etc., for both the countries, there is always a possibility of substantial expansion of trade between them. Cooperation, comparative advantages and phased Tariff Liberalization Programme (TLP) can boost up the trade between them to the optimum level.

## **FINDINGS and CONCLUSIONS**

The SAARC completed its existence of 25 years. SAARC is expected to be an instrument for the promotion of peace, progress and stability in this part of the world. SAARC countries are continuously trying to co-operate with each other in the search for solution to their own problems though they are neither equal in size nor equal in economic development. From the beginning India plays a significant role in the SAARC trade. Among the

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SAARC countries Bangladesh is the largest trading partner of India which shows a substantial growth in terms of exports, imports, trade balance and total trade. Cooperation, comparative advantages and phased TLP can boost up the trade between India-Bangladesh and with other SAARC countries to the optimum level. SAARC's most difficult obstacle lies in the structural characteristic of the system. Though countries like India and Bangladesh face the same problems, discussions on preferential trading, energy cooperation, regional university, and control of trafficking will help India to expand its trade with other regional countries.

**REFERENCES**

- Baysan, T., Panagariya, A., and Pitigala, N. 2006. Preferential Trading in South Asia. World Bank Policy
- Behera, N. C. 2008. SAARC and Beyond Civil Society and Regional Integration in South Asia. SACEPS
- Dhungel, D. 2004. South Asian Association for Regional Cooperation (SAARC): Prospect for Development
- GATT report-1993
- Official website of SAARC (<:<http://www.saarc-sec.org>>30 January,2014)
- Report of Ministry of External Affairs- India –various issues
- Report of CMIE –various issues
- Report of DGCI&S-various issues
- <:<http://go.worldbank.org>> 18 January 2014
- <:<http://compendium.iift.ac.in/index.asp>> 10 February 2014

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## **BUYING MOBILE HANDSETS: A COMPARATIVE STUDY ON RURAL AND URBAN CUSTOMERS**

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### **ABSTRACT**

*The mobile handsets industry in India has been an attractive destination for the global mobile handset manufacturers from the very start. It was thought in the beginning that the mobile phones in India will serve the growing communication needs in the country. Considering the growth of the industry in India, it can be said that the estimated results have been achieved beyond expectations. There are two big reasons for the rapid growth of mobile phones industry in India. First, there is a huge market for entry-level mobile phones in urban and rural area. And second, the high-end advanced handset buyers too exist in the Indian mobile phone market. The present study has empirically analyzed the Comparative Buying Behavior of Rural and Urban costumers' for Mobile Handsets. Data was collected through self structured questionnaire for the study and independent t sample test used as statistical tools for Comparative analysis of Buying Behavior of Rural and Urban costumers' for Mobile Handsets. A finding of the study has revealed differentiating factors which motivates the rural and urban Mobile Handset users, which can be appropriately incorporated in marketing strategy formulation by mobile handset manufacturers and marketers for efficient targeting their products and optimizing their marketing goal achievement.*

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### **INTRODUCTION:**

Today through cellular phone has change life style and working method of peoples in India as well as whole world, now we able to contact anybody anywhere at any time. The mobile handsets industry in India has been an attractive destination for the global mobile handset manufacturers from the very start. It was thought in the beginning that the mobile phones in India will serve the growing communication needs in the country. Considering the growth of the industry in India, it can be said that the estimated results have been achieved beyond expectations.

Apart from mobile phone manufacturers, the industry has also seen the growth of mobile phone carriers, mobile phone application developers, mobile phone content providers and so on. It is expected that the industry is going to keep on growing to attain the anticipated goals at a fast rate. There are two big reasons for the rapid growth of mobile phones industry in India. First, there is a huge market for entry-level mobile phones. And second, the high-end mobile phone buyers too exist in the Indian mobile phone market. These reasons encourage the top mobile phone manufacturers to experiment their products from different categories in the Indian market.

While Samsung, Nokia, Sony and LG are some of the topmost companies that have successfully launched a number of mobile phone models in the country, the companies like Blackberry too are joining the league fast. Besides, there has been a recent rise in the local mobile manufacturers as well. Micromax, Karbonn and Spice are some of the local manufacturers that have started grabbing a significant share in the mobile phones industry in India. To match up the growing demand of mobile phones, the mobile phone carrier services like Bharti Airtel, Tata Teleservices and Reliance Communications have improved their services as well. Uninor and Videocon are among the latest entrants among mobile service providers that are making place for themselves at a fast rate.

### **CONCEPT OF THE RESEARCH**

There is no definition of what constitutes a rural area. However, an urban area is defined as per the Census of India as all places with a municipality, corporation, cantonment or a notified town area and 'all other places where a minimum 5000 populations are living and out of which at least 75% of male is choosing in non-agricultural business. Further, the density of population of an urban area is at least 400 persons per square kilometer. For our present study the area which does not satisfy the above criteria was considered as rural area.

Compared to the urban counterparts, rural consumers have different interpretations of colours, symbols, and social activities. Rural consumers show a preference for bold, primary colours; red colour connotes happiness and auspiciousness, and green colour prosperity. Ownership of a large tractor, large house (pucca house), telephone and other higher-value consumer durables, and education of children in cities are considered as status symbols.

Opinion leaders and people who are perceived to be knowledgeable play an important role as information providers and advisors. Word of mouth has more significance in purchase decisions of rural consumers. Family members, relatives, and friends are consulted before making purchase decisions of higher-value products. However, as the exposure to mass media and information technology is increasing, rural consumers are becoming more informed about products and services, and their dependence on traditional reference groups is gradually waning. As a result of the increasing role of self-help groups and other government institutions involved in developmental activities, professionals working for such agencies act as reference sources. They tend to exhibit greater trust in products and services endorsed by the government and its agencies. Rural consumers also tend to be more loyal as brand switching has greater perceived risk.

The consumption patterns of the rural consumers have undergone a radical shift in last few years. As incomes as well as expenditure in rural areas have increased, their spending on non-food items has also increased. The increasing demand for many products can be accounted for this by changing pattern. However, the rural income is seasonal in nature and to a great extent influenced by non-controllable factors such as draughts and floods, crop failures due to pests, and similar factors. For the working class in rural areas, wages are distributed daily, weekly, or fortnightly and come in small installments. Demand for many products in rural areas, thus, is seasonal in nature.

#### **BRIEF LITERATURE REVIEW**

A complex set of factors influence rural consumer's behaviour. Social norms, traditions, castes, and social customs have greater influence on the consumer behaviour in rural areas than in urban areas. The seasonality of agricultural production influences the seasonality of rural consumers' demand. Given the fact that the landless labourers and daily-wage earners get their income in installments, their purchasing is restricted to small quantities of products at a time, mostly on a daily basis or once in two or three days (Jha Mithileshwar, 2007).

Mobile texting in vernacular languages has the potential to accelerate vernacular language mobile applications Hindi and other vernacular languages (Punjabi, Marathi, Odiya, Bengali, Telugu, Gujarati, and Kannada) are the foundation for future revenue 'growth'. A leading Indian operator completed a pilot project involving Hindi predictive mobile texting demonstrations to users in Haryana and the results showed that mobile texting rose during the period, and there were messages still being sent one month after the trial.

The Indian rural market with its vast size and demand base, offer a huge opportunity that companies can't afford to ignore. To expand the market share more and more companies are foraying into India's rural markets. Among those that have made some headway are HLL, Coco-cola, Britannia, LG, Philips and Colgate Palmolive to name a few (Balaji Satyanarayana, 2007).

The average mobile telephone today could potentially come equipped with still and video camera capabilities, multimedia file swapping, global positioning satellite receivers, music players, access to radio and television content, email and Web browsers, databases, address books, clocks, games and many other upgradeable software applications. The computing power contained in the circuitry of the average mobile phone today is greater than that of the on-board systems. (Prensky, 2006).

#### **RATIONALE OF THE STUDY**

Marketers are today making a beetling towards rural India. The 740 million potential consumers and 6,30,000 village is rural India make up for 41% of India's middle-class and 58% of the country's total disposable income. Little wonder than that almost all of corporate India is falling head over heels to reach out to rural India, which can add substantially to their bottom lines. The purpose of this study is to apply a consumer decision-making model to examine the mobile shopping styles involving to analyze specific shopping pattern differences among rural consumer and urban consumer. In which situation they stand for using the mobile? How the consumers of specific areas are significance for mobile market? This study will play an important role for marketers, that what extra efforts are needed to increase their sales and market share?

**OBJECTIVE OF THE STUDY**

The objective of the study is meant to explore the consumer's behaviour especially buying mobile handsets in both rural and urban areas. It also emphasis the impacts of competitive brands of mobile handsets on boosting of buying behaviour among the rural and urban customers. The motivating factors for the study are taken as price, quality, style and current trends, functions, and brand. The other associated research objectives are to examine the source of information about the mobile phones, most preferred brand of mobile phone and role of family members in influencing the buying decision.

**HYPOTHESIS FORMULATION**

Following hypotheses were stated for the study and tested at 5% level of significance.

**H 1:** Price of handset significantly affects buying behaviour of rural and urban customers.

**H 2:** Promotional Activity of handset significantly affects buying behaviour of rural and urban customers.

**H 3:** Availability of handset significantly affects buying behaviour of rural and urban customers.

**H 4:** Friends & Family suggestions for handset significantly affect buying behaviour of rural and urban customers.

**H 5:** Brand name of handset significantly affects buying behaviour of rural and urban customers.

**H 6:** Battery Back-up of handset significantly affects buying behaviour of rural and urban customers.

**H 7:** Multiple SIM facility of handset significantly affects buying behaviour of rural and urban customers.

**H 8:** Visual Appearance of handset significantly affects buying behaviour of rural and urban customers.

**H 9:** 3G Service of handset significantly affects buying behaviour of rural and urban customers.

**H 10:** Touch Screen of handset significantly affects buying behaviour of rural and urban customers.

**H 11:** GPRS Support of handset significantly affects buying behaviour of rural and urban customers.

**RESEARCH METHODOLOGY**

**Research Type:** Descriptive in nature.

**Sampling Type:** Judgmental and Convenience non probabilistic.

**Sampling Unit:** Users of mobile phone.

**Sample Size:** 120. 60 each from rural and urban areas.

**Place of Study:** Mobile consumers belonging to both rural and urban area of Ganjam district of Odisha are examined. English and Odiya questionnaires are used as research instruments. Data collected from users of mobile phone from Ganjam district's only. The rural study was conducted in three villages named Kalamba, khanduru and Bara gaon, of Polasara panchayat samiti, Ganjam district of odisha and the urban study were taken consumers from Berhampur Municipality Corporation, odisha.

**DATA COLLECTION:****Primary Data**

Primary data for the study collected though self structured questionnaire comprising of 11 items. Reliability of questionnaire checked with the help of Cronbach's alpha, its value found to be 0.641. Validity of questionnaire checked with the help of academic experts in the field. Five point Likert scale ranging from 5 (Strongly Agree) to 1(Strongly Disagree) was used for measuring perception of respondents.

**Secondary Data**

Secondary data collected through Books, journals, magazines, newspapers, industry Reports Company's internet site other relevant studies material and Website.

**RESULT AND DISCUSSION:**

**TABLE 1: DEMOGRAPHIC PROFILE OF RESPONDENTS**

<b>Age</b>	<b>Frequency</b>	<b>Per cent</b>
18–25 yrs	<b>45</b>	<b>37.5</b>
25–40 yrs	<b>52</b>	<b>43.3</b>
Above 40	<b>23</b>	<b>19.2</b>
<b>Gender</b>		
Male	<b>76</b>	<b>63.3</b>
Female	<b>44</b>	<b>36.7</b>
<b>Location</b>		
Urban	<b>60</b>	<b>50</b>
Rural	<b>60</b>	<b>50</b>
<b>Profession</b>		
Service	<b>33</b>	<b>27.5</b>
Business	<b>26</b>	<b>21.1</b>
Student	<b>41</b>	<b>34.2</b>
Farmer	<b>20</b>	<b>16.7</b>

It is exhibited in Table 1 that approximately 38% of the respondents were in the age group of 18–25 years, 43% were in the age group 25–40 years and 19% were above 40 years of age. Male were dominated as respondents with 64% and female were 36%. 17% were farmers, 21% were having self business, 28% belonged to service class and 34% were student. Respondents were included in equal number from rural and urban area for the study.

**TABLE 2: BRAND WISE HAND SET USAGE PATTERN**

<b>Handsets</b>	<b>Frequency</b>	<b>Per cent</b>
<b>Nokia</b>	<b>67</b>	<b>55.83</b>
<b>Samsung</b>	<b>19</b>	<b>15.83</b>
<b>Sony Ericson</b>	<b>06</b>	<b>5</b>
<b>LG</b>	<b>06</b>	<b>5</b>
<b>Micromax</b>	<b>13</b>	<b>10.83</b>
<b>Spice</b>	<b>06</b>	<b>5</b>
<b>Others</b>	<b>03</b>	<b>2.5</b>
<b>Total</b>	<b>120</b>	<b>100</b>

Table 2 exhibits the Brand wise Hand set usage Pattern. Nokia handsets were majority in use with 55.83%, followed by Samsung with 15.83%, Micromax 13%, Sony Ericson, Spice, LG each with 5% and others (2.5%).

**TABLE 3: BRAND WISE HAND SET USAGE PATTERN OF URBAN USERS**

<b>Handsets</b>	<b>Frequency</b>	<b>Per cent</b>
<b>Nokia</b>	<b>39</b>	<b>65</b>
<b>Samsung</b>	<b>12</b>	<b>20</b>
<b>Sony Ericson</b>	<b>02</b>	<b>3</b>
<b>LG</b>	<b>02</b>	<b>3</b>
<b>Micromax</b>	<b>04</b>	<b>7</b>
<b>Spice</b>	<b>01</b>	<b>2</b>
<b>Others</b>	<b>00</b>	<b>0</b>
<b>Total</b>	<b>60</b>	<b>100</b>

Brand wise Hand set usage Pattern of Urban users is shown in Table 3. The percentage share of different brands of handsets were Nokia 65%, Samsung 20%, Sony Ericson & LG 3 %, Spice 1%, and Micromax 7% respectively.



**TABLE 4: BRAND WISE HAND SET USAGE PATTERN OF RURAL USERS**

Handsets	Frequency	Per cent
Nokia	28	46
Samsung	07	12
Sony Ericson	04	7
LG	04	7
Micromax	09	15
Spice	05	8
Others	03	5
Total	60	100

Brand wise Hand set usage Pattern of Urban users is shown in Table 4. The percentage share of different brands of handsets were Nokia 46%, Samsung 12%, Sony Ericson & LG 7 %, Spice 8%, Micromax 15% and others 5% respectively.

**TABLE 5: URBAN USERS SOURCE OF INFORMATION FOR HAND SETS**

Source	Frequency	Per cent
Newspaper	01	01
TV	13	22
Internet	13	22
Friends & Family	30	50
Other	03	05
total	60	100

Urban users Source of Information for Handsets is shown in Table 5. It show that out of 60 urban respondents 1% have used news paper as a source of information for buying handsets, 22% have got information through TV & Internet, where as majority of respondents (50%) have received Friends & Family suggestion and other sources of information was limited to 5%.

**TABLE 6: RURAL USERS SOURCE OF INFORMATION FOR HAND SETS**

Source	Frequency	Per cent
Newspaper	04	07
TV	10	17
Internet	01	01
Friends & Family	39	65
Other	06	10
total	60	100

Rural users Source of Information for Handsets is shown in Table 6. It show that out of 60 rural respondents 7 % have used news paper as a source of information for buying handsets, 17% have got information through TV, 1% through Internet, where as majority of respondents (65%) have received Friends & Family suggestion and other sources of information was 10 %.

**TABLE 7: INDEPENDENT SAMPLE t TEST FOR URBAN AND RURAL USERS**

Attributes	t	Sig. (2-tailed)
Price influences my buying behaviour of Mobile Handset	-3.792	.000
Promotional activity influences my buying behaviour of Mobile Handset	-3.007	.003
Availability of handset influences my buying behavior Mobile Handset	-5.610	.000
Friends & Family suggestion influences my buying behaviour of Mobile Handset	-1.354	.178
Brand name influences my buying behaviour of Mobile Handset	-1.417	.159
Battery back-up influences my buying behaviour of Mobile Handset	-1.507	.135
Multiple SIM handset influences my buying behavior of Mobile Handset	-4.704	.000
Visual appearance of handset influences my buying behavior of Mobile Handset	1.060	.291

3G service handset influences my buying behavior of Mobile Handset	<b>1.612</b>	<b>.110</b>
Touch screen handset influences my buying behavior of Mobile Handset	<b>1.726</b>	<b>.087</b>
GPRS support handset influences my buying behavior of Mobile Handset	<b>3.289</b>	<b>.001</b>

It is exhibited in Table 7 that there was significant difference in Rural & Urban costumers' Buying Behavior for Mobile Handsets for Price, Promotional activity, Availability of handsets, Multiple SIM and for GPRS support system. Hence hypotheses **H1, H2, H3, H7** and **H11** were accepted and remaining hypotheses **H4, H5, H6, H8, H9** and **H10** were rejected.

**TABLE 8: MEAN AND STANDARD DEVIATION OF MEASURING ATTRIBUTES**

<b>Attributes</b>	<b>Location</b>	<b>Mean</b>	<b>Std. Deviation</b>
Price influences my buying behaviour of Mobile Handset	Urban	4.2000	1.02180
	Rural	4.7833	.63318
Promotional activity influences my buying behaviour of Mobile Handset	Urban	3.8667	.96492
	Rural	4.3000	.56148
Availability of handset influences my buying behavior of Mobile Handset	Urban	3.5833	1.07816
	Rural	4.5333	.74712
Friends & Family suggestion influences my buying behaviour of Mobile Handset	Urban	4.1333	.96492
	Rural	4.3500	.77733
Brand name influences my buying behaviour of Mobile Handset	Urban	4.4500	.92837
	Rural	4.6500	.57711
Battery back-up influences my buying behaviour of Mobile Handset	Urban	4.2833	.82527
	Rural	4.5000	.74788
Multiple sim handset influences my buying behavior of Mobile Handset	Urban	3.3333	.87656
	Rural	4.0500	.79030
Visual appearance of handset influences my buying behavior of Mobile Handset	Urban	3.9667	.82270
	Rural	3.8000	.89821
3G service handset influences my buying behavior of Mobile Handset	Urban	3.8448	1.12080
	Rural	3.5500	.85222
Touch screen handset influences my buying behavior of Mobile Handset	Urban	3.6000	.97772
	Rural	3.3000	.92608
GPRS support influences my buying behaviour of Mobile Handset	Urban	3.9333	.95432
	Rural	3.2667	1.24692

It is observed in the study Table 8 that rural respondents were significantly more influenced than urban respondents that price of handset, promotional activities and availability of handsets affects their buying behavior. Both rural and urban respondents were consistent in their opinions that Friends and Family members' suggestion, Brand name of handset, Battery backup influences their buying of handset, but rural respondents were relatively more influenced by these factors; Whereas urban users were relatively more influenced than rural user for Visual appearance of handset, 3G adoptive services, Touch screen handset and GPRS support handsets.

## CONCLUSION

Connecting communities across continents have shrunken the world into the small desktop. Tremendous flows of information and revolution in communication technology have pivotal impact on the world community and global business. The conglomerates around the globe plugged into this information super highway in order to ensure their competitive edge in the global commerce. In this direction mobile handsets contribution is revolutionary as desktop cannot be operated everywhere. Therefore, now-a-days modern mobile handsets are being viewed and also used as an alternative mode for transmission of data, information and communication. The present study on Comparative Analysis of Rural & Urban costumers' Buying Behavior for Mobile Handsets has revealed differentiating factors which motivates the rural and urban users. Findings of the study can be incorporated in marketing strategy formulation by mobile handset manufacturers and marketers for efficient targeting their products and optimizing their marketing goal achievement. It must be clearly realized by the marketers of mobile handsets that their rural marketing efforts cannot succeed if the marketing strategy and action plans are only extrapolation or minor modification of the urban marketing strategy and plans. They

must have to be differentiate and innovative and in their product offering to urban and rural mobile handset users.

#### SELECTED REFERENCES

- Anand & Hundal, B. S. (2007). Motivators for purchase of durables for rural and urban consumers of Punjab: A case study. The ICFAI Journal of Management Research.
- Badi, Ravindranath V. and Badi, Naranyansa V. (2004), *Rural Marketing*, Himalaya Publishing, 2004.
- Jha, Mithileshwar, (2007), *Rural Marketing in India*, In Kotler, P. and Keller, K.L., Koshi Abraham and Jha Mithileshwar, *Marketing Management*, 12th edition, pp. A1–A6, Delhi, India, Dorlings Kindersley(India) Pvt, Ltd.
- Karjaluoto, H., J. Karvonen, et al. (2005). "Factors affecting consumer choice of mobile phones: two studies from Finland." *Journal of Euro marketing* 14 (3): 59-82.
- Krishnama charyulu, C.S.G. and Ramkrishnan, Lalitha (2003), *Rural Marketing*, 2nd edition, Pearson Education Singapore.
- Kotler, P. and Keller, K.L. (2006), *Identifying Market Segments and Targets*, *Marketing Management*, 12<sup>th</sup> Edition, Pearson Education Singapore, p. 234.
- Lee, J. and L. Feick (2001). "The impact of switching costs on the customer satisfaction - loyalty link: mobile phone service in France." *Journal of services marketing* 15(1): 35-48.
- Prensky, M. (2006), *Don't Bother me Mom—I'm Learning*, Minnesota: Paragon House.
- <http://www.123eng.com/forum/viewtopic.php?t=50509>
- Rahman, Z. and S. Bhattacharyya (2003). "Sources of first mover advantage in emerging markets an Indian perspective." *European Business Review* 15(6): 359-369.
- Ram, S., and Jagdish N. Sheth (1989), "Consumer Resistance To Innovations: The Marketing Problem And Its Solutions, " *Journal at Consumer Marketing*, Vol. 6, No.2 (Spring), pp 514.
- Satyanarayana, Balaji (2007), "Rural Marketing the Road for Sustainable Growth", *Marketing Mastermind*, Vol. 8(5), pp. 22–24.
- Wilska, T.A. (2003) "Mobile phone use as part of young people's consumption Styles." *Journal of Consumer Policy* 26(4):441-463.

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## **PUBLIC PREFERENCE ON LONG DISTANCE TRAVEL BY ROAD TRANSPORT IN ASSAM: A CASE STUDY OF ASTC**

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### **ABSTRACT**

*The topographical area of Assam consists of plain and hill areas. 84% area of Assam is connected by road and due to this reason the total road length covered by ASTC is 8130 Km as against 2517 Km covered by Railway route. Assam State Transport Corporation ( ASTC ) a well known premier public enterprise and passenger road transport organization operates bus services in Assam and interstate bus services to the adjoining states. The Bus service is very affordable, safe and reliable and covers every nook and corner of the State.*

*The present study has been undertaken to find the passengers' perception regarding the service quality offered by the public sector corporation and for which 200 passengers who used long distance bus services of ASTC are interviewed in 4 locations of ASTC station namely Guwahati, Dibrugarh , Silchar and Lakhimpur. Recommendations have been made to improve the service quality and customer satisfaction that enabled the corporation to retain their existing clients as well as attract new passengers.*

*Key words: Assam, AST , Service, Corporation*

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### **INTRODUCTION**

The topographical area of Assam consists of plain and hill areas. 84% area of Assam is connected by road. Due to this Bus-based public transport system continues to dominate in terms of coverage and patronage. Road Transport plays a vital role in the economic development and social integration of Assam. To take this advantage lot of private players offer long distance Bus based road transport in Assam. These players offer services ranging from Volvo luxury Sleeper bus, Executive Chair bus, Air-condition Volvo Semisleeper bus etc. The major player in the sectors are:

- Assam State Transport Corporation ( ASTC )
- Network Travel
- Bluehill Travel
- Green Valley Travel

### **ASSAM STATE TRANSPORT CORPORATION ( ASTC )**

Assam State Transport Corporation ( ASTC ) a well known premier public enterprise and passenger road transport organization operates bus services in Assam and interstate bus services to the adjoining states. The ASTC was an organization set up by the State Government to handle speedy transportation and supply of construction material with a fleet of a good number of trucks during the 2nd World War and was the nucleus of the present Assam State Transport Corporation. In 1948 the State Government took up the Road Transport nationalization scheme and the State Transport came into being. The nationalized passenger transport services were first introduced on 16<sup>th</sup> January, 1948, on Guwahati -Nagaon route, a distance of 123 Km. with only 8 nos of buses. The Road Transport Corporation Act, 1950 has been extended to the State of Assam with effect from 10th March, 1970 and the Assam State Transport Corporation was constituted by the government of Assam, under the Road Transport Act 1950, which took over the management of the department undertaking ( State Transport, Assam ) with effect from 30th March, 1970. The main function of the ASTC is to offer dependable and safe passenger road transport network to every nook and corner of the State.

Assam State Transport Corporation provides transit facility in different cities of Assam and to the neighboring states. The passenger transport service is very affordable, safe and reliable and is known all over the state of Assam. It has in its fleet different types of buses from luxury and regular type's buses for normal bus routes and special mini buses for hill routes. ASTC operates Night super deluxe, super fast deluxe, executive class, air conditioned class and Volvo coach buses providing affordable bus fares and reliable road transport to passengers. The ASTC which was in the brink of closure in the early part of 2001 has now turned around

because of the bold and result oriented policy adopted by the State Government. Now it has become one of the leading transport corporations of the country.

### OBJECTIVES OF THE STUDY

The present research was conducted on public preference on long distance travel by Bus based road transport to travel in Assam. The primary objectives of the study are to examine the following:

- To study the customer preference and behavior on selection of operators.
- To study the customer satisfaction level.

### THE DATA AND RESEARCH METHODOLOGY

The study was restricted to Assam only. The research was conducted on 200 customers who used long distance bus services of ASTC. The interview was conducted at 4 locations of ASTC station from where the operator offered services. These locations are Guwahati , Dibrugarh , Silchar and Lakhimpur. Data was collected with the help of a structured, non disguised questionnaire.

### LIMITATIONS OF THE STUDY

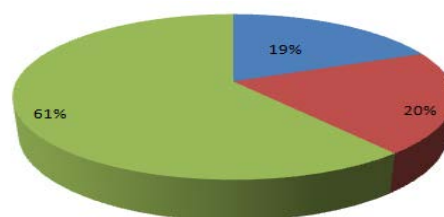
1. The sample size taken is assumed to represent the entire population of Assam.
2. The study is based on a limited sample of 200, which may not give true picture of the population.
3. Conclusions are drawn based on response of respondents.
4. Duration of the study was for a period of 30 days only which is not sufficient for a detailed study.

### FINDING OF THE STUDY

This section discusses and analyses the demographic profile of the customers, their preference and behavior

#### • Demographic Age profile of the Target Segment

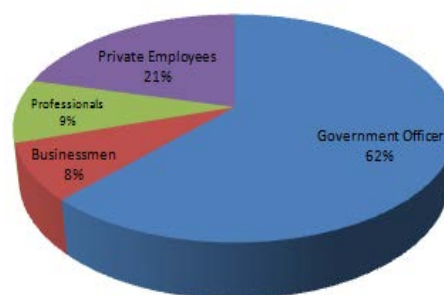
Age	No of Respondents	Percentage
16 - 35	38	19
36 - 55	40	20
56 - 70	122	61



From the above table & graph, it can be interpreted that out of 200 respondents of different age profile, elder age people are using more ASTC than the young people.

#### • Service profile of the Target Segment

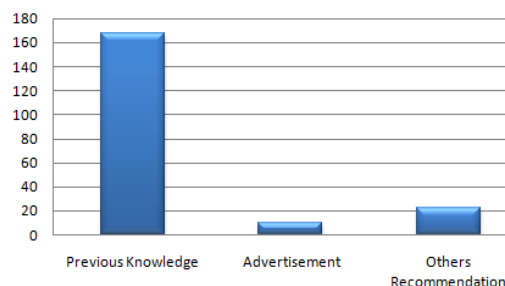
Description	No of Respondents	Percentage
Government Servant	124	62
Businessmen	16	8
Professionals	18	9
Private Employees	42	21



From the above table & graph, it is understood that out of 200 respondents interviewed of different service profile, Public / Government servant are using more ASTC services than the Businessmen and professional. It was also observed that most of the Government Servant using the services are on official duty.

#### ● Factors Influencing in Selection of Operator

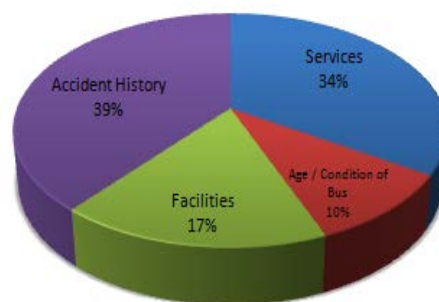
Description	No of Respondents	Percentage
Previous Knowledge	168	84
Advertisement	10	5
Others Recommendation	22	11



From the above analysis, it is opined that out of 200 respondents interviewed about factor influencing in selection of operator, 168 have selected the service based on previous knowledge and 22 on friend's / others recommendation. It was also observed that most of the Government Servants using the services are on official duty because of official instruction given to use public sector services only.

#### ● Customer Selection Criteria of Operator

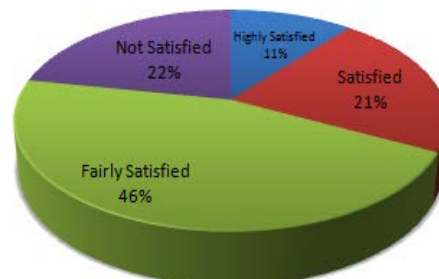
Description	No of Respondents	Percentage
Services & Fare	68	34
Age / Condition of Bus	20	10
Facilities	34	17
Accident History	78	39



From the above table & graph, it can be interpreted that out of 200 respondents, 34 % respondents used ASTC services because of availability of services to towns and sub-urban areas of lower and upper Assam ,where private operators do not offer their services and also because it offers affordable bus fares. It was also observed that 39% respondents use this service due low rate of road accident history.

#### ● Customer Satisfaction on Operator Services

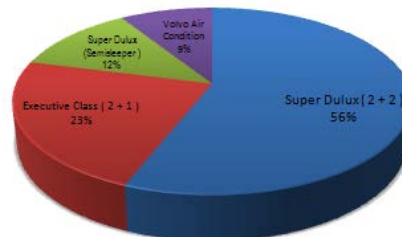
Description	No of Respondents	Percentage
Highly Satisfied	22	11
Satisfied	43	21.5
Fairly Satisfied	91	45.5
Not Satisfied	44	22



From the above table & graph, it is understood that out of 200 respondents interviewed for service satisfaction level, 45 % of the respondents are fairly satisfied with the services. It was also observed that customer satisfaction level is poor due poor quality of bus, staff behavior, cleanness, facility in passenger waiting area and poor response on customer complaint. Most of the respondents used the services because of low fare, non availability of services by private operators, Government official duty, Government concession of fare etc.

● **Seat Occupancy in Buses Used by Operators**

Description	No of Respondents	Percentage
Super Dulux ( 2 + 2 )	112	56
Executive Class ( 2 + 1 )	46	23
Super Dulux (Semisleeper)	24	12
Volvo Air Condition	18	9



From the above table & graph, it can be interpreted that out of 200 respondents on criteria of seat occupancy, 56 % respondents select ASTC services due to affordable low fare compare to private operators. It was also observed that most of the higher class seat like Executive class Volvo Air Condition are occupied by Government official duty and Senior citizen getting concession on fare.

**FINDINGS AND CONCLUSIONS**

- ▶ 76% of the respondents are males and 24% are females for the study.
- ▶ 81% of the respondents are fall in the age group of 36 – 70 years where as 68% of the respondents are using the service since last 2 years.
- ▶ 83% of the respondents using the services are either government servant and private employee and they are of lower grade. The main factor of selection is lower fare and non availability of service by private operators. Most of these respondents prefer to travel in Super Dulux ( 2 + 2 ) configuration seat bus.
- ▶ Most of satisfied respondents either belong to concessional category or from sub-urban areas and rural area.
- ▶ Majority of Businessmen & Professionals are not satisfied with service quality due to lack of cleanness inside bus as well as in waiting lounge, Poor booking system, poor condition of buses, lack in response of customer complaints. Most of these category respondents avail the service due to low ratio of road accidents and Volvo Air Condition bus service from Guwahati to Digboi and Silchar.

It is observed that Assam State Transport Corporation plays a vital role in the progress and prosperity of Assam. It not only covers every nook and corner of the State but also offer services to the neighboring states. It offers a very affordable service to the people of Assam. But from the study it was observed that the customer service satisfaction level is very poor and most of the customer using the services is from government department, concessional category and rural people. Very few percentages of businessmen and professionals use the corporation service. In today's competitive market scenario, organizations should understand the importance of building and effectively managing the relationship with its passengers. For building and maintaining a healthy relationship with the passenger, organizations need to understand and meet the expectations of its passenger. The organization today should aim not only at the delivery of service to the passengers, but should also focus on satisfying the passengers with the service. Thus it has become imperative for organizations to identify factors that cause passenger satisfaction or dissatisfaction and consciously measure them so as to try and bring about the necessary changes on the basis of passenger perceptions enabling them to retain their existing clients as well as to attract new passengers.

**REFERENCES**

**JOURNAL**

1. Agarwal, O. P. (2001), "Towards a national urban transport policy", Indian Journal of Transport Management 25 (6): 593–616.
2. Padam S. ( 2001 ), "Issues in Pricing : The Case of Public Transport in India", Indian Journal of Transport Management 25 (1): 11 – 17.
3. Mishra R. K. & Nandagopal K. ( 1991 ), "Efficiency through organizational innovativeness in passenger road transport: the case of Tamilnadu Road Transport Undertakings", Management Review vol. 16 ( 1 & 2 ) : 3 – 32.

4. Singh, Sanjay K.(2005 ), “Review of Urban Transportation in India”, Journal of Public Transportation, Vol. 8 (1) : 79 – 97.
5. Singh, Sanjay K.(2000), “Technical Characteristics and Efficiency of the Indian State Road Transport Undertakings”, Indian Journal of Transport Management 24 (8): 533 – 543.
6. Singal, B.I. ( 2010 ), “Towards Sustainable Urban Transport in India”, Journeys :13 – 22.
7. Thomas M. K. (2000), “Public Sector Bus Transport in India in the New Millennium : A Historical Perspective”, Ebenezer Publisher, Pune.

**REPORTS**

1. Report of the Sub-Group on Passenger and Freight Traffic Assessment and Adequacy of Fleet and Data Collection and Use of IT in Transport Sector in the Twelfth Five Year Plan (2012-17) submitted on September 2011 Ministry of Road Transport & Highways, Government of India.
2. Transport Research Wing, Ministry of Road Transport & Highways, Government of India, New Delhi. Motor Transport Statistics of India. Various issues.
3. Ministry of Urban Development, Government of India, New Delhi. 1998. Traffic and Transportation Policies and Strategies in Urban Areas in India. Final Report.
4. Report of the Sub-Group on State Road Transport Undertakings formed under the Working Group on Road Transport Constituted by Planning Commission.

**WEB**

1. <http://www.data.gov.in/category/keywords/state-road-transport-undertakings>
2. [www.indiastat.com/transport/30/vehicles/289/stateroadtransportundertakings/1644/stats.aspx](http://www.indiastat.com/transport/30/vehicles/289/stateroadtransportundertakings/1644/stats.aspx)
3. [http://en.wikipedia.org/wiki/Assam\\_State\\_Transport\\_Corporation](http://en.wikipedia.org/wiki/Assam_State_Transport_Corporation)
4. [http://articles.timesofindia.indiatimes.com/2012-10-21/guwahati/34627007\\_1\\_special-buses-astc-upper-assam-districts](http://articles.timesofindia.indiatimes.com/2012-10-21/guwahati/34627007_1_special-buses-astc-upper-assam-districts)
5. [http://assamgovt.nic.in/pdf/transport\\_admin\\_report.pdf](http://assamgovt.nic.in/pdf/transport_admin_report.pdf)



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## **CHALLENGES, DRAWBACKS AND BEST PRACTICES OF RFID TECHNOLOGY IN HANDLING OF INFORMATION AND LIBRARIES**

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### **ABSTRACT**

*The study presents the Recent gadgets in information technology and redefining of librarian's roles for present and future in dealing with library and information with new approach to circulation, tracking, inventorying and security of material in library and the study describes challenges, drawbacks and best practices of RFID technology considering the cost , competition, user privacy chances of removal of exposed tag etc., in the present information explosion age , So this paper is concentrate on the challenges, drawbacks and best practices of RFID in the library.*

*Keywords: Role of ICT, Challenges, Drawbacks of RFID and Best Practice of RFID*

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### **I. INTRODUCTION**

In recent days, radio frequency identification technology has moved from obscurity into mainstream applications that helps speed the handling of information and Libraries. It support a larger set of unique IDs than bar code and can incorporate additional data such as manufacturer, product type, and also measure environmental factors such as temperature and RFID systems can discern many different tags located in the same general area without human assistance. For instance supermarket checkout counters, where you must orient each bar-coded item toward a reader before scanning it and why has it taken over 50 years for this technology to become main stream? The primary reason is cost. For electronic identification technologies to compete with the rock-bottom pricing of printed symbols, they must either be equally cheapest or provide enough added values for an organization to recover the cost elsewhere. RFID is not as cheap as traditional labeling technologies, but it does offer added service and is now at a critical price point that could enable its large-scale adoption for managing consumer retail goods.

### **II. MEANING AND DEFINITION**

In general like bar codes, RFID tags identify materials. However, unlike bar codes, which must be in close proximity and line of sight to the scanner for reading, RFID tags don't require line of sight and can be embedded within packages. It depending on type of application and tag, they can be read at a varying range of place and distances. In addition, RFID-tagged cartons rolling on a conveyer belt can be read many times faster than bar-coded boxes.

RFID is the data collection technology that uses electronic tags for storing data. The tag, also known as an "electronic label," "transponder" or "code plate," is made up of an RFID chip attached to an antenna. Transmitting in different ranges like kilohertz, megahertz and gigahertz ranges, tags may be battery-powered or derive their power from the RF waves coming from the reader.

**According to Oxford Dictionary:** Radio frequency identification, a method for tracking goods by means of tags which transmit a radio signal.

### **III. OBJECTIVES OF THE STUDY**

1. To know the concept of RFID Technology
  2. To know the importance of RFID Technology
  3. To know the comparison between RFID and Barcode
  4. To know the brief history of RFID technology
  5. To know the challenges of RFID
  6. To know the Drawbacks of RFID in the handling of information and libraries
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7. To discuss the best practices of RFID in handling of information and libraries
8. To identify expectations from RFID technology

#### IV. WHY IMPORTANCE FOR RFID IN LIBRARIES

That's good but why is everyone talking about RFID now? Well after 15 years of test, trials and live specialized use and a number of converging factors have increased the attention and also momentum behind RFID. These are best summarized as in Figure 1 from Deloitte Consulting.

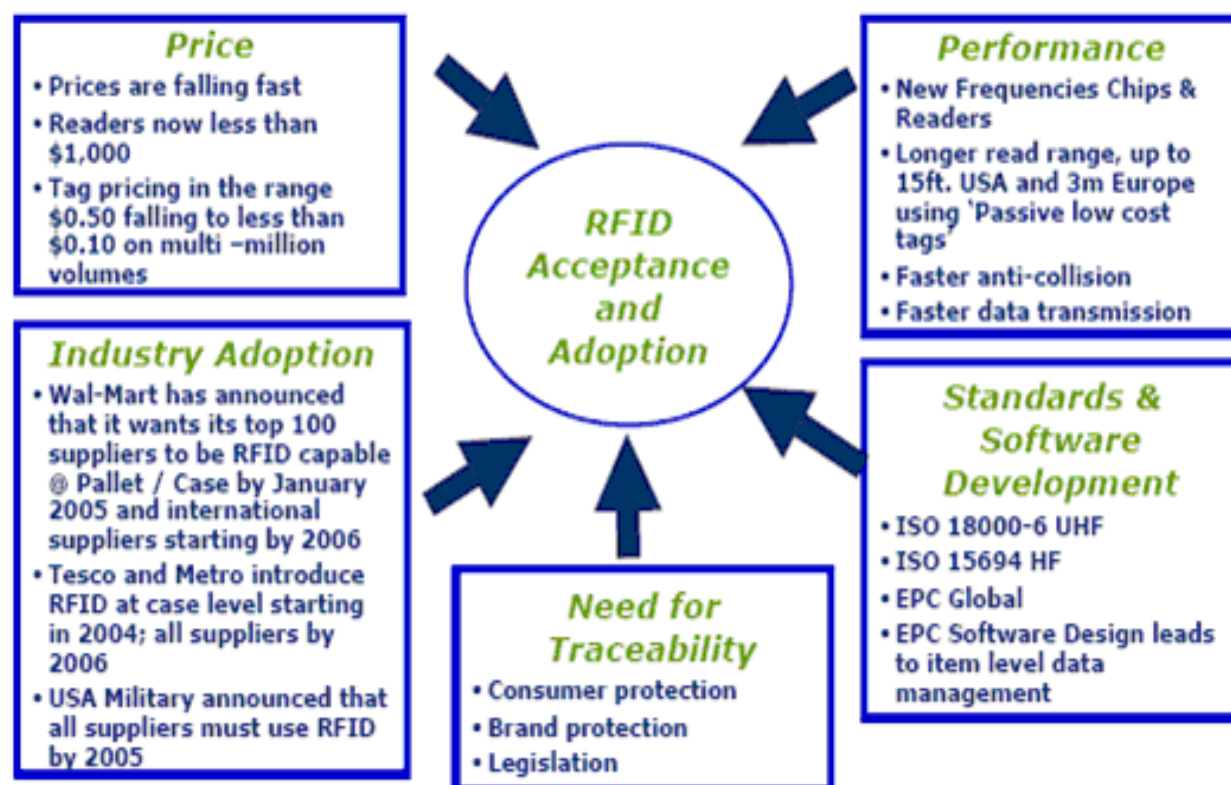


Figure: 1 Deloitte Consulting

#### V. COMPARISON BETWEEN RFID AND BARCODE

RFID and barcodes are similar in that both are data collection technologies, meaning they automate the process of collecting data. However, they also differ significantly in many areas. Although this comparison primarily focuses on the advantages of RFID over barcodes, RFID will not completely replace barcode technology. Barcodes offer some advantages over RFID, most notably their low cost

RFID		BARCODE
<b>Line of Site</b>	Not required (in most cases)	Required
<b>Read Range</b>	Passive UHF RFID: <ul style="list-style-type: none"> <li>- Up to 40 feet (fixed readers)</li> <li>- Up to 20 feet (handheld readers)</li> </ul> Active RFID: <ul style="list-style-type: none"> <li>- Up to 100's of feet or more</li> </ul>	Several inches up to several feet
<b>Read Rate</b>	10's, 100's or 1000's simultaneously	Only one at a time
<b>Identification</b>	Can uniquely identify each item/asset tagged.	Most barcodes only identify the type of item (UPC Code) but not uniquely.
<b>Read/Write</b>	Many RFID tags are Read/Write	Read only

Technology	RF (Radio Frequency)	Optical (Laser)
<b>Interference</b>	Like Transportation Security Administration (TSA) some RFID frequencies don't like Metal and Liquids. They can interfere with some RF Frequencies.	Obstructed barcodes cannot be read (dirt covering barcode, torn barcode, etc.)
<b>Automation</b>	Most "fixed" readers don't require human involvement to collect data (automated)	Most barcode scanners require a human to operate (labor intensive)

## VI. HISTORY OF RFID TECHNOLOGY:

RFID technology was invented in 1948, but it wasn't mainstreamed for commercial applications until the 1980. One of its first known applications was during World War II, where it was used by the British radar system to differentiate between German aircraft and their own aircraft with attached radio transponders.

Only recently, due to technology advances have the price points dropped to where RFID is now feasible for companies and institutions to adopt. Wal-Mart was among the first commercial enterprises to select RFID technology to achieve improvements in the inventory supply process and theft control. Wal-Mart started work on implementing RFID throughout its retail distribution chain by requiring its top 100 suppliers to use RFID tags by year-end 2004 on the pallets and cases they shipped to Wal-Mart.

However, in 2004 due to the status of standards and limited tag production capacity, manufacturers of RFID tags were unable to meet the volume of demand within Wal-Mart's desired time limit. As the standards further involved, production capabilities expanded and price points kept dropping, Wal-Mart's modernization is now in full swing with most of their top suppliers delivering RFID tagged pallets and crates to all of Wal-Mart's distributions centers.

RFID use has started to penetrate other corporate supply chains, but in many cases these implementations are closed loop systems. In other words, the RFID is deployed within a particular corporation's supply chain, but not between them and their business trading partners. There are other applications which are also limited to deployment within a single organization, such as tracking tools so they aren't left behind in the airplane after maintenance

### Statistical history of RFID

1940 – 1950	Radar refined and used, major World War II development effort RFID invented in 1948.
1950 - 1960	Early explorations of RFID technology, laboratory experiments
1960 – 1970	Development of the theory of RFID. Start of applications field trials.
1970 – 1980	Explosion of RFID development. Very early adopter implementations of RFID
1980 – 1990	Commercial applications of RFID enter mainstream.
1980 – 1990	Commercial applications of RFID enter
1990 - 2000	Emergence of standards. RFID widely deployed RFID becomes a part of everyday

## VII. CHALLENGES OF RFID

1. Supply chain inefficiencies: Today, many supply chain inefficiencies originate from inaccurate data about where products are in the supply chain. Retailers may provide point of sale (POS) data to the manufacturer, but without the knowledge of existing inventory levels and stock in transit, these data points are not sufficient for accurate demand planning.
2. While there is increasing pressure on manufacturers, distributors, and retailers to maximize efficiency, minimize cost and provide the best value to the end customer
3. Buffer stocks, out-of-stocks and late shipments impact on margins of products
4. Inaccurate data causes expensive manual interventions 30 per cent of supplier transactions contain errors
5. Discontinuous data flow across the supply chain leads to redundant data entry/duplication of effort

6. Inability to trace products and ingredients to suppliers and customers makes information sharing and product recalls complex and expensive
7. Ability of LIS professionals in changing their work environment in advanced age.
8. Cost effectiveness of RFID technology is playing biggest challenge for LIS Professionals
9. Lack of standardisation in RFID becomes the challenge for selecting the best technology.

### **VIII. DRAWBACKS OF RFID TECHNOLOGY**

Dead areas and orientation problems – RFID works similar to technologies the way of cell phone or wireless network does. Like these technologies, there may be certain areas that have weaker signal and poor read rates are sometimes a problem when the tag is rotated into an orientation that does not align well with the reader..

1. Security concerns – Because RFID is not a line-of-sight technology like bar-coding, new security issues could develop. For instance, a competitor could set up a high-gain directional antenna to scan tags in trucks going to a warehouse. From information received, this competitor could determine flow rates of various materials. Additionally, when RFID is used for high-security operations such as payment methods, cheating is always a possibility.
2. Ghost tags – In rare cases, if multiple tags are read at the same time the reader will sometimes read a tag that does not exist. Hence, some type of read verification, there are CRC, should be implemented either in the tag, reader or the data read from the tag.
3. Vulnerable to damage – Water, static discharge or high-powered magnetic surges (such as lightning strike) may damage the tags.
4. Unread tags – When reading multiple tags at the same movement, it is possible that some tags will not be read and there is no sure method of determining this when the objects are not in sight. This problem will not occur with barcodes, for this when the barcode is scanned, it is instantly verified when read by a beep from the scanner and the data can then be entered manually if it does not scan.
5. High cost – Because this technology is still new, the components and tags are costlier compared to barcodes. Like software and support personnel needed to install and operate the RFID reading systems (in a warehouse for example) may be more costly to employ.
6. RFID Reader Collision: Reader collision occurs when the signals from two or more readers overlap. The simultaneous queries tag is unable to respond and systems must be carefully set up to avoid this problem; many systems use an anti-collision protocol (also called a simulation protocol. Anti-collision protocols enable the tags to take turns in transmitting to a reader.
7. RFID tags are difficult to remove: RFID tags are difficult to for consumers to remove; some are very small (less than a half-millimetre square and as thin as a sheet of paper) - others may be hidden or embedded inside a product where consumers cannot see them. New technologies allow RFID tags to be "printed" right on a product and may not be removable at all
8. It has been referred to as invasive technology. Consumers are apprehensive about their privacy when they barrowed documents with RFID tags

### **VII. BEST PRACTICES OF RFID TECHNOLOGY**

1. Library mission: some libraries view RFID as an opportunity to enhance other, possibly neglected, parts of their mission by automating elements of their circulation activities and redeploying personnel. Library outreach programs such as language training, children's programming and services for new Canadians can benefit from the energies of qualified and interested staff redeployed from a more automated circulation system.
2. Speed of circulation: RFID has been shown to reduce circulation congestion at both self-check stations, and at the circulation desk, by allowing for stacks of items to be checked out simultaneously. Many librarians believe that reducing circulation waits translates into better customer satisfaction.

3. Best Usage of Money: a return on investment calculation for RFID, dependent on some variables, shows an investment payback period of three to seven years. Libraries that have conducted a full ROI calculation believe that they can enjoy significant hard and soft savings into the future.
4. Future growth: the productivity gains of RFID may not be a current requirement, but in rapidly growing communities, library directors and boards are concerned about being able to offer the current level of services in the future. Increasing populations means increasing circulation, demands on, and the stretching of library services. Some libraries see a staged RFID implementation as a solution to future library resourcing problems.
5. New library: the very best time to discuss RFID is when a new library is being designed and constructed or an existing building is renovated. The architect can, more easily, accommodate siltation and other equipment in the planning stage, and an RFID investment seems less significant when rolled into a capital building or renovation budget.
6. Tag Specification: to ensure long term consistency, standardization and reliability for future RFID implementations, The Library Network RFID committee recommended that all new RFID installations within the TLN cooperative follow the ISO/IEC 15693 and ISO/IEC 18000-3 Mode 1 standard with the 3M tag data model. This tag format will provide for optimal standardization while supporting legacy 3M libraries and will not impact each library's ability to choose a preferred vendor
7. Sorting Systems: Sorting systems can be retrofitted into existing library item return areas. The system is designed to connect to the ILS and check-in items that can be sorted by different categories (ex: book, DVD, fiction, non-fiction, etc.)
8. Data Forma: Tag specifications deal with chip communication. Data format is how the information is stored on the tag. It is of upmost importance that the 3M programming model (data format) be used in order to ensure compatibility with other libraries. Below are recommendations depending on vendor selection.

## **IX. EXPECTATIONS FROM RFID**

RFID technology will only become more widely used in libraries as the cost of tags will continue to decrease and the security issues are dealt with. Basic economic rules will apply, as there is a greater demand for the technology, there will be a greater supply and a lower cost. The same is true for the security of information transmitted by RFID, as there is a greater demand for increased security, the technology will develop and become available. The industry will respond to the will of its customers, both commercial and public, just as these respond to the will of the public.

## **CONCLUSION**

RFID is an excellent “advanced” bar-code, but not a replacement and it has to be need to improve the security for too many flows and also standardizations concerning it ought to fallows standardization in product and services.

## **REFERENCE**

1. <http://www.webopedia.com/TERM/R/RFID.html>
2. <http://oxforddictionaries.com/definition/english/RFID>
3. [http://www.inlogic.com/rfid/rfid\\_vs\\_barcode.aspx](http://www.inlogic.com/rfid/rfid_vs_barcode.aspx)
4. <http://www.technovelgy.com/ct/Technology-Article.asp?ArtNum=20>
5. <http://www.community.psion.com/cfs-file.../4300.History-of-RFID-008.pdf>
6. <http://terpconnect.umd.edu/~segloff/RFIDTest3/FutureofRFID.html>
7. <http://allbarcodesystems.com/faqs/what-are-the-advantages-and-disadvantages-of-rfid/>
8. [http://www.libsys.co.in/download/implementing\\_rfid\\_in\\_Libraries.pdf](http://www.libsys.co.in/download/implementing_rfid_in_Libraries.pdf)
9. <http://www.swdsi.org/swdsi06/proceedings06/Papers/A03.pdf>

## EMERGING TRENDS IN GREEN MARKETING WITH REFERENCE TO BANGALORE

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### ABSTRACT

Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. Yet defining green marketing is not a simple task where several meanings intersect and contradict each other; an example of this will be the existence of varying social, environmental and retail definitions attached to this term. This is a Key factor which is developing important place in the modern market trend. As a result of this businesses have increased their rate of targeting consumers who are concerned about the environment. This research paper discusses how businesses have increased their rate of targeting green consumers, those who are concerned about the environment and allow it to affect their purchasing decisions. The paper also examines the present trends of green marketing at the field.

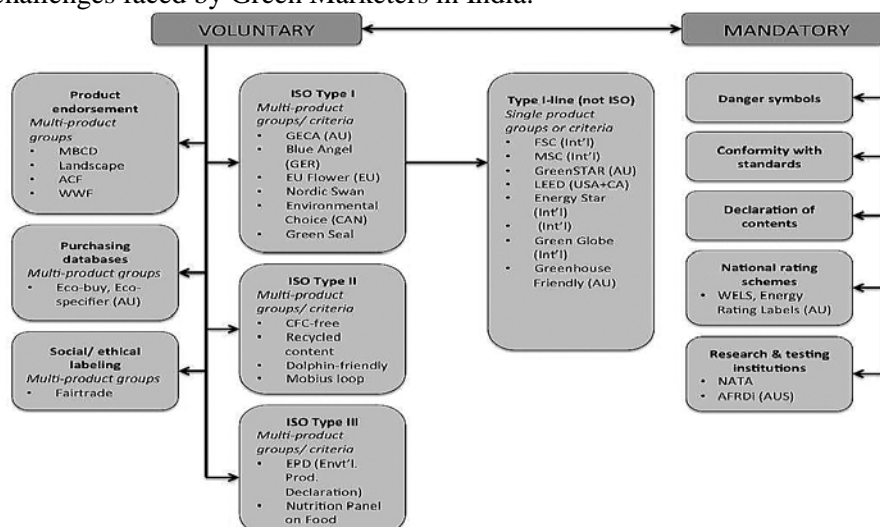
**Keywords:** Green marketing, concept, green practices, green products, price, consumer behavior, environmentally friendly product, eco-friendly product, ecological marketing.

### INTRODUCTION

According to American Marketing Association, Green Marketing is the Marketing of products that are presumed to be environmentally safe. On account of increasing global warming and other ecological disorder a need for environment friendly products & services has arisen and marketers these days either due to Government pressure or as a social responsibility has taken up green marketing i.e. Marketing products and services based on environmental factors or awareness. It incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. Yet defining green marketing is not simple task where several meanings intersect and contradict each other, an example of this will be the existence of varying social environmental and retail definitions attached to this term. Other similar terms used are Environmental Marketing consumption an disposal of products and services happen in a manner that is less detrimental to the environment with going awareness about the implications of global warming, non-biodegradable solid waste, harmful impact of pollutants etc., both Marketers and consumers are becoming increasingly sensitive to the need for switch in to green products and services. While the shift to “green” may appear to be expensive in the short term, it will definitely prove to be indispensable and advantageous, cost-wise to, in the long run.

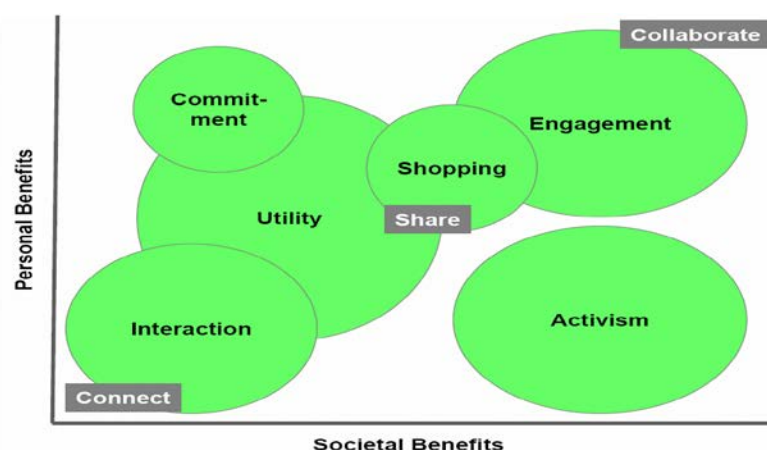
### OBJECTIVES OF THE STUDY

- ❖ To discuss the need for Green Marketing from different perspectives.
- ❖ To understand the strategy needed for successful Green Marketing.
- ❖ To study the present scenario and potential of green marketing in India.
- ❖ To study the challenges faced by Green Marketers in India.



### GREEN MARKETING -WHY?

Worldwide evidence indicates people are concerned about the environment and are changing their behaviour. As a result of this, green Marketing has emerged which speaks for growing market for sustainable and socially responsible products and services. Thus the growing awareness among the consumers all over the world regarding protection of the environment in which they live, people do want to bequeath a clean earth to their offspring. Various studies by environmentalists and others indicate that people are concerned about the environment and are changing their behaviour pattern so as to be less hostile towards it. Now we see that most of the consumers, both individual and industrial are becoming more concerned about environment friendly products.



### FIVE SIMPLE RULES OF GREEN MARKETING

- 1. Know your Customer:** if you want to sell a greener product to consumers, you first need to make sure that the consumer is aware of and concerned about the issues that your product attempts to address. Whirlpool is just one company that learned this lesson the hard way. Even after winning \$ 30 million “Golden carrot” prize for being first to market with a CFC-free fridge, they discovered that consumers wouldn’t pay the premium because they didn’t know what CFCs were and there were no other value-added benefits.
- 2. Empower Consumer:** Make sure that consumers feel, by themselves in concert with all the other users of your product, that they can make a difference. This is called empowerment and it’s the main reason why consumers buy greener products. This powerful principle underlines so many campaigns laden with tips.
- 3. Be Transparent:** Consumers must believe in the legitimacy of your products and the specific claims you are making. Caution: there’s a lot of skepticism out there that is fueled by the raft of spurious claims made in the “go-go” era of green marketing that occurred during the late 80s early 90s one brand of household cleaner claimed to have been environmentally friendly since 1884.
- 4. Reassure the Buyer:** Consumers need to believe that your product performs the job it’s supposed to do. They won’t forego product quality in the name of the environment.
- 5. Consider your pricing:** if you’re charging more for your product and many environmentally preferable products cost more due to economies of scale and use of higher quality ingredients-make sure those consumers can afford the premium and feel it’s worth it. Many consumers of course, can’t afford premium for any type of product these days, much less greener ones, so keep this in mind as you develop your target audience and products specifications.

### CHARACTERISTICS OF GREEN PRODUCTS

The products those are manufactured through green technology and that caused no environmental hazards are called green products. Promotion of green technology and green products is necessary for conservation of natural resources and sustainable development. We can define green products by following measures:

- ❖ Products naturally grown.
- ❖ Products those are recyclable, reusable and biodegradable.
- ❖ Products with natural ingredients without preservatives.
- ❖ Products containing recycled contents, non-toxic chemical.
- ❖ Products contents under approved chemical.
- ❖ Products that do not harm or pollute the environment.
- ❖ Products that will not be tested on animals
- ❖ Product that have eco-friendly packaging i.e. reusable refillable containers etc.



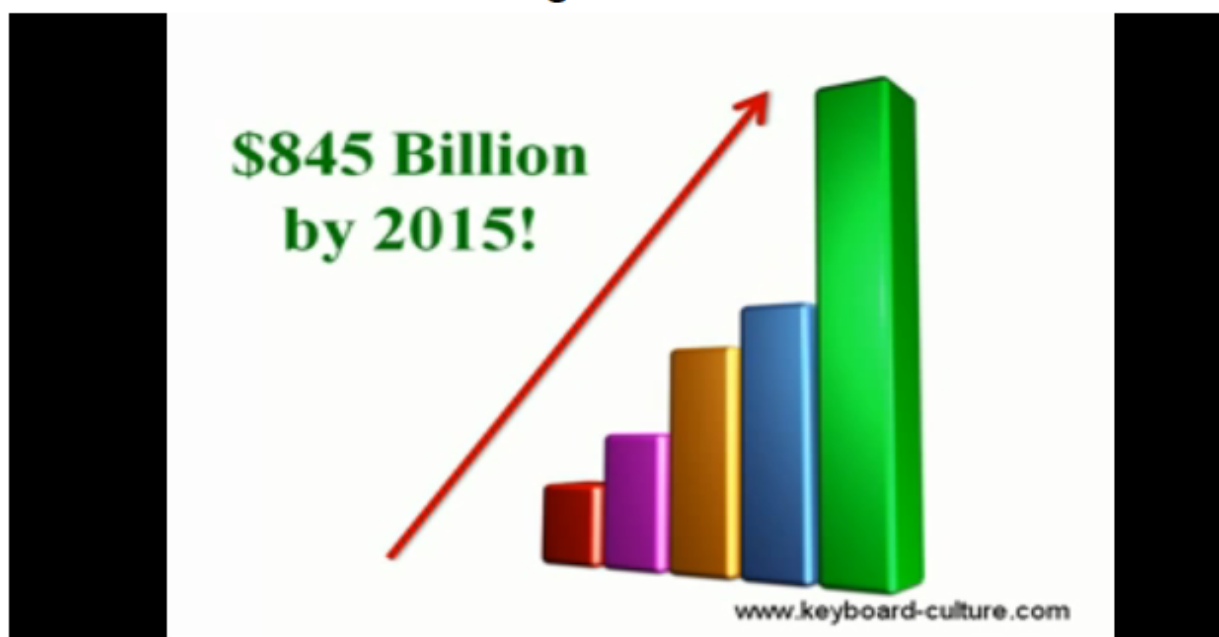
## NEED AND SCOPE OF GREEN MARKETING

- ❖ There is growing interest among consumers all over the world regarding protection of environment.
- ❖ Our quality of life is increasingly impacted
- ❖ To fulfill the obligation of social responsibilities towards society.
- ❖ To comply with governmental policies and pressure.
- ❖ To be ahead of competitors, green marketing can be used strategy.
- ❖ Helps in reducing costs on account of recycling.
- ❖ Customers also feel satisfied by using green products as they contribute to nature.
- ❖ It helps in accessing the new markets where environmental standards are given prime importance.

Issues like global warming and depletion of ozone umbrella are the main for the healthy survival. Every person rich or poor would be interested in quality life with full of health and vigor and so would the corporate class. Financial gain and economic profits is the main aim of any corporate business. But harm to environment cost by sustain business across the globe is realized now though off late. This sense is building corporate citizenship in the business

class. So green marketing by the business class is still in the selfish anthological perspective of long term sustainable business and to please the consumer and obtain the license by the governing body. Industries in Asian countries are catching the need of green marketing from the developed countries but still there is wide gap between their understanding and implementation.

### The Effects of Green Marketing: Consumer Trends Drive Profit



## THE GREEN MARKETING MIX

**Product:** A Producer should offer ecological products which not only must not contaminate the environment but should protect it and even liquidate existing environmental changes.

**Price:** price for such products may be a little higher than conventional alternative. But target groups like for example LOHAS are willing to pay extra for green products.

**Place:** A distribution logistics of crucial, main is on ecological packaging. Marketing local and seasonal products like vegetables from regional farms is easier to be marketed “green” than products imported.

**Promotion:** A Communication with the market should put stress on environmental aspects for example storing the natural environment is also very important. And last but not least, ecological products will probably require special sales promotion.

Additional Social Marketing “P’s” that are used in this process are as followed:

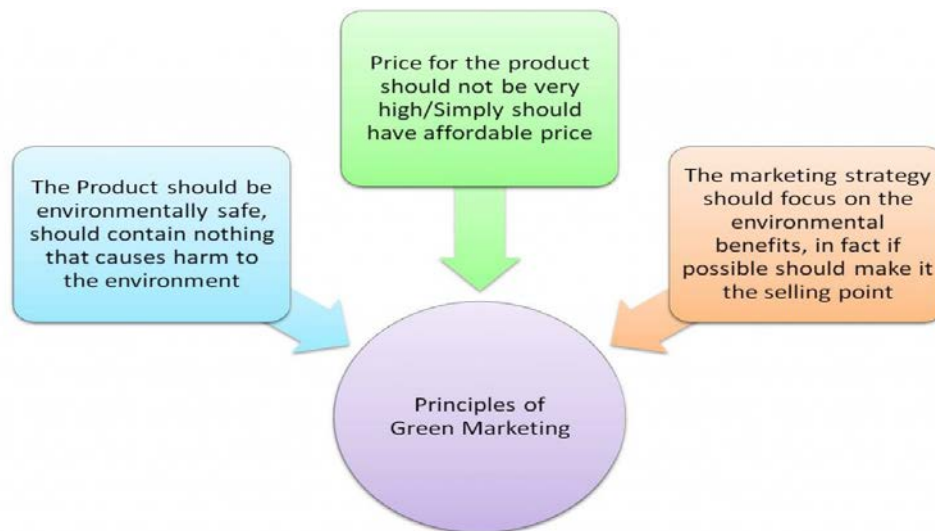
**Public:** Effective social marketing knows its audience and can appeal to multiple groups of people.” Public” is the external and internal groups involved in the programme. External publics include the target audience,



secondary audience, policymakers, and gatekeepers, while the internal publics are those who are involved in some with either approval or implementation of the programme.

**Partnership:** Most social changes issues, including “green” initiative are too complex for one person or group to handle. Associating with other groups and initiatives to team up strengthens the chance of efficacy.

**Policy:** Social Marketing programs can do well in motivating individual behavior change, but that is difficult to sustain unless the environment they are in support that changes for the long run. Often, policy change is needed and media advocacy programs can be an effective complement to a social marketing program.



## VARIOUS CHALLENGES IN GREEN MARKETING

### Need for standardization:

It is found that only 5% of the Marketing Messages from Green campaigns are entirely true and there is a lack of standardization to authenticate these claims. There is no standardization currently in place to certify a product as organic. Unless some regulatory bodies are involved in providing the certifications there will not be any verifiable means. A standard quality control board needs to be in place for such labeling and licensing.

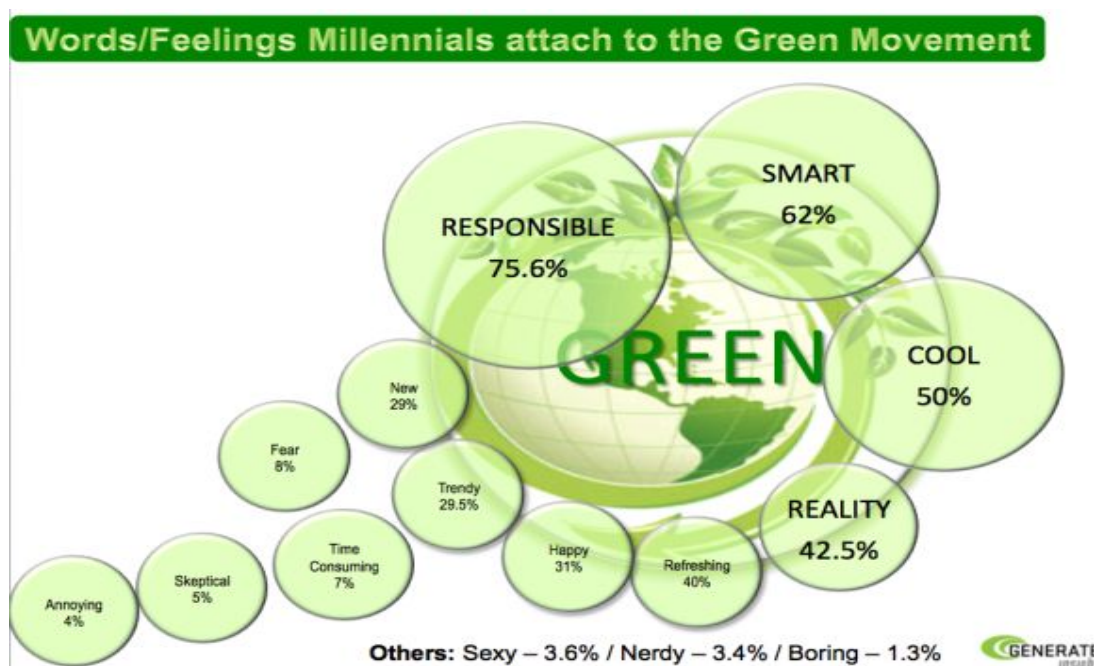
### New Concepts:

Indian Literate and urban consumer are getting more aware about the merits of green products. But it is still a new concept for the masses. The consumer needs to be educated and made aware of the environmental threats. So before paying premium for green products and services, they look for the authentication, and false claims will lead negative perceptions about organization as well as green practices. The new green movements need to reach the masses and that will take a lot of time and effort. By India's ayurvedic heritage, Indian Consumers do appropriate the importance of using natural and herbal beauty products.

Indian consumer is exposed to healthy living lifestyles such as yoga and natural food consumption. In those aspects the consumer is already aware and will be inclined to accept the green products.

### PROBLEMS:

1. Firms may use green marketing to mislead the customers by means of giving false information.
2. Educating all the customers about use & need of green products is difficult.
3. Environmental policies are not uniform throughout the country and across the globe this makes standardization of products difficult.
4. Green marketing involves huge capital investment in adapting environmentally friendly technology and SMEs may not afford this.
5. Established companies fear alienating their base of mainstream consumers by appealing to the green consumer.
6. Low awareness among consumer about ECO mark.
7. Price sensitive consumers.



### LET'S GO GREEN: THE GREEN COMPANIES

General Electric	GE's Presence on this list might surprise you, but the steps they have taken towards Green operations are undeniable. Since 2006, the company has sold over 12 \$ billion of its ECO imagination products.
McDonalds	McDonalds now works in close collaboration with PETA on systematically reforming its business practices to be more humane and friendly to the environment in which they operate.
Starbucks	Starbucks has green advocates smiling about its "bean to cup" approach, which stresses top efficiency at each link of its global supply chain by all measures the program appears to be great success with the company's decision to use coffee ups sleeves made by recycled papers roughly saved 78,000 tress per year since 2006 starbucks has also partnered up with many environmental organizations
Coca-Cola	Coca-Cola has narrowed down 3 environmental goals on which to focus their effort: Water stewardship, sustainable packaging and climate & energy protection.
HP	Another Computing Company its claim to greener pastures it HP. The Company has gotten out in front of the computer disposal issue by owning and operating enormous" e-waste" recycling plants that shared discarded, obsolete computer products into raw material that can be recycled into industrial food chain.
TESCO	This British grocery chain has enlisted its customer base in the fight to go green by offering savings to shoppers who bring reusable bags to their stores.

### FUTURE OF GREEN MARKETING:

There are many lessons to be learned to avoid green marketing myopia, the short version of all this is that effective to make green products desirable for consumers.

### CONCLUSION:

In the paper we have shown that green marketing is a very difficult concept. Due to increase of global warming the firms have to product green marketing commodities. Adoption of green marketing in the society may not be easy in the short run, but in the long run surely it will be profitable. Government and various social organizations to practice green marketing for sustainable development. Also the consumers will be conscious to buy green marketing products, although these products are comparatively costly.

**REFERENCE:**

1. [www.green marketing.com](http://www.greenmarketing.com)
2. [www.greenbiz.com](http://www.greenbiz.com)
3. [www.environmentalleader.com](http://www.environmentalleader.com)
4. [www.sba.gov](http://www.sba.gov)
5. [www.marketingeye.com](http://www.marketingeye.com)

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**EXAMINE THE RELATIONSHIP BETWEEN FREE FLOAT OF SHARES AND P/E RATIO WITH A PRICE BUBBLE IN THE COMPANIES LISTED IN TEHRAN STOCK EXCHANGE**

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**ABSTRACT**

*The purpose of this study is to investigate the relationship between free float of shares and the P/E ratio with a price bubble in the companies listed in the Tehran Stock Exchange. This statistical society contains 50 companies which are more active than others announced by the Stock Exchange in 2010. The scopes of this study are 2008 and 2009. In this study it was used Logic model, for data analysis. Test result show that there is no significant relationship between free float of shares and the P/E ratio with a price bubble.*

*Key word: Security market, Price Bubble, Free float of share, P/E ratio*

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**INTRODUCTION**

Investing is one of the most important factor in economic growth, and we known an incentive to maximize profit and minimize loss of Investing, are the main criteria for effective decision in the stock market like any other markets. As stock markets is an important choice for investing, so it is in good position to attract capital, and investors with consider degree of risk and expected result pick out their shares. Therefore, the efficiency of capital markets and financial resources necessary to attract investors and thus more efficient allocation of resources that they have, it means that the prices fluctuations in the market should develop logically based on fundamental factors. If the stock price changes rapidly and fluctuations due to irrational factors, this option will be reduced the attractiveness of investment and control the outflow of capital from the markets, ultimately it will reduce capital investment and economic growth. [1]

Economists use the term “speculative bubble” to describe a situation where asset prices rise above levels justified by economic fundamentals. Fundamental value levels for assets can be measured in multiple ways. Often they are measured in terms of the discounted future cash flows an asset may accrue. [2]

However the fundamental valuation is computed, one thing is certain: assets prices rise during bubbles, and do so to the point of being “over-priced.” The prices then continue to raise further and further, far out-stripping any reality-based valuation. This goes on until some event stymies the buying, and then a steep price decline ensues. Economists and scholars from various disciplines have for years speculated about the causes of such run-ups in asset prices. These causes include but are not limited to: government regulation/de-regulation, supportive monetary policy, new technologies, cultural changes favoring business, demographic changes, expansion of media reporting of business news, over-optimistic analyst forecasts, the growth of investment vehicles (like mutual funds), the perceived decline of inflation, the expansion of trading volume via retail trading, and the popularization of gambling. These factors combine with other amplification mechanisms like herd behavior, over-confidence, and general irrational exuberance about the future to induce and support asset price run-ups. [3]

Since there is a bubble in share prices, effect Prices of other assets, even if they do not have Condition of bubbles, and bubbles are caused severe price difference And weaken the market forces of supply and demand, Which eventually leads to exit of liquidity from the market and capital flight from the country, Discussion of bubbles and identify factors that are affecting the stock market bubbles is more important for Officials that they have correct policy to avoid it.

## LITERATURE REVIEW

### 2.1. Concepts and Definitions

#### 2.1.1. Price bubble

At the peak of tulip mania some single tulip bulbs sold for more than 10 times the annual income of a skilled craftsman. It is generally considered the first recorded speculative bubble (or economic bubble) [4] , although some researchers have noted that the Kipper- und Wipperzeit episode in 1619–22, a Europe-wide chain of debasement of the metal content of coins to fund warfare, featured mania-like similarities to a bubble.[5] The term "tulip mania" is now often used metaphorically to refer to any large economic bubble (when asset prices deviate from intrinsic values) .[6]

Bubbles are often precipitated by perceptions of real improvements in the productivity and underlying profitability of the corporate economy. But as history attests, investors then too often exaggerate the extent of the improvement in economic fundamentals Human psychology being what it is, bubbles tend to feed on themselves, and booms in their later stages are often supported by implausible projections of potential demand. Stock prices and equity premiums are then driven to unsustainable levels.

Certainly, a bubble cannot persist indefinitely. Eventually, unrealistic expectations of future earnings will be proven wrong. As this happens, asset prices will gravitate back to levels that are in line with a sustainable path for earnings. The continual pressing of reality on perception inevitably disciplines the views of both investors and managers. [7]

Mathematical economics defines an asset price bubble as a positive difference between the actual and the pair (fundamental) price of the asset. The actual price is given in standard modals of follows: [8]

$$(1) \quad p_t = \sum_{j=1}^{\infty} \frac{E_t(d_{j+t})}{(1+r)^j} + b_t$$

When  $d_t$  indicates dividends,  $p_t$  is price at time  $t$ ,  $E_t(0)$  is the expected value of the expression incorporating all available information at time  $t$ . if the rate ( $r$ ) is fixed for the whole period , the first complex term gives the equilibrium price (fundamental value). [9]

#### 2.1.2. Free float

The free float is generally defined as the number of outstanding shares minus shares that are restricted from trading. The free float ratio is the proportion of free floating shares in outstanding shares. Shares that are restricted from trading are called stable shareholdings, and include cases such as shares held by a parent company for control of a subsidiary, shares held by the government, and cross-shareholdings among companies. [10]

A method by which the market capitalization of an index's underlying companies is calculated. Free-float methodology market capitalization is calculated by taking the equity's price and multiplying it by the number of shares readily available in the Market. Instead of using all of the shares outstanding like the full-market capitalization method, the free-float method excludes locked-in shares such as those held by promoters and governments.

Calculated as: [11]

$$\text{FFM} = \text{Share price} \times (\text{\#Share outstanding} - \text{Locked in Shares}) \quad (2)$$

#### 2.1.3. p/e ratio

The price/earnings ratio is one of the oldest and most frequently used metrics. Although a simple indicator to calculate, the P/E is actually quite difficult to interpret. It can be extremely informative in some situations, while at other times it is next to meaningless. As a result, investors often misuse this term and place more value in the P/E than is warranted. The P/E ratio is equal to a stock's market capitalization divided by its after-tax earnings over a 12-month period, usually the trailing period but occasionally the current or forward period. The value is the same whether the calculation is done for the whole company or on a per-share basis. For example, the P/E ratio of company A with a share price of \$10 and earnings per share of \$2 is 5. The higher the P/E ratio, the more the market is willing to pay for each dollar of annual earnings. Companies with high P/E ratios are more likely to be considered "risky" investments than those with low P/E ratios, since a high P/E ratio signifies high expectations. Comparing P/E ratios is most valuable for companies within the same industry. The last year's price/earnings ratio (P/E ratio) would be actual, while current year and forward year price/earnings

ratio (P/E ratio) would be estimates, but in each case, the "P" in the equation is the current price. Companies that are not currently profitable (that is, ones which have negative earnings) don't have a P/E ratio at all. Also called earnings multiple<sup>3</sup>.

## 2.2. Research Backgrounds

Vakili Fard et al in [12]: in their thesis ("The relationship between the amount of free float of shares with a price bubble in the companies listed in Tehran Stock Exchange"), at first with a logistic regression found there is a significant relationship between the amount of free float and price bubbles, and then announced that the companies whose free float of shares less than 20 percent are more prone to bubbles.

Greenwood & Nagel in [13]: in their research ("Inexperienced investors and bubble") use mutual fund manager data from the technology bubble to examine the hypothesis that inexperienced investors play a role in the formation of asset price bubbles. Using age as a proxy for managers' investment experience, they find that around the peak of the technology bubble, mutual funds run by younger managers are more heavily invested in technology stocks, relative to their style benchmarks, than their older colleagues. Furthermore, young managers, but not old managers, exhibit trend-chasing behavior in their technology stock investments. As a result, young managers increase their technology holdings during the run-up, and decrease them during the downturn. Both results are in line with the behavior of inexperienced investors in experimental asset markets. The economic significance of young managers' actions is amplified by large inflows into their funds prior to the peak in technology stock prices.

Nunes & D. Silver in [14]: in their research ("Rational Bubbles in Emerging Stock Markets") detected rational bubbles in 22 emerging stock markets using both standard and threshold cointegration. Eighteen stock markets experienced explosive bubble. (and some of them periodically collapsing bubbles as well) the remaining four markets experienced collapsing bubbles only.

Bohl, Siklos in [15]: in their thesis ("The present value model of U.S. stock prices redux") Relying on a present value model with time-varying expected returns, and incorporating a quite general class of processes to model bubble like stock price deviations from the long-run equilibrium, they provide empirical evidence on the US log dividend-price ratio over the 1871:1 - 2001:9 period, as well as for several sub-periods. The application of a momentum threshold autoregressive technique designed to detect asymmetric short-run adjustments to the long-run equilibrium provides empirical support in favor of the long-run validity of the present value model. Nevertheless, in the short-run, US stock prices exhibit large and persistent bubble like departures from present value prices followed by a crash.

Nasseh, Strauss in [16]: in their thesis ("Stock Prices and the dividend discount model: did their relation break down in the 1990s?") They examine whether there has been a stable relation between prices and dividends over the past 20 years for firms in the S&P 100. Their results support the present-value model and a close link between stock prices and dividends for most of the sample period. However, since the mid 1990s, the present-value model parameters indicate a 43% overvaluation of stock prices. They show that a short-run decline in long-term interest rates and a breakdown in the historic price dividend relation can explain the overvaluation.

## 2.3. Hypotheses of Research:

H1: free float of shares has significant effect on price bubble;

H2: P/E ratio has significant effect on price bubble;

## 2.4. Research method:

This research is a descriptive - correlation and comparison study. For collecting data theoretical studies and library is used. We use library, research papers mostly collected from the internet, books, journals and specialized journals has been collected English and Latin. This statistical society contains 50 companies which are more active than others announced by the Stock Exchange in 2010. The scopes of this study are 2008 and 2009.

## 2.5. Research variables:

### 2.5.1. Independent variable

#### 2.5.1.1. Free float

For collecting the information of free float, we use the data which calculated by Tehran Stock Exchange. First we sort data in Excel software, then the average of free float have been calculated for every year.

<sup>3</sup> : [http://www.investorwords.com/3656/P\\_E\\_ratio.html#ixzz278GLrqLt](http://www.investorwords.com/3656/P_E_ratio.html#ixzz278GLrqLt)

### 2.5.1.2. P/E ratio

For collecting P/E in each year, the weighted average of P/E has been extracted with Rhavrdnovin software.

### 2.5.2. Dependent variable

#### 2.5.2.3. Price bubble

The dependent variable in this study is a price bubble. We use Run test to separate bubble companies.

## 2.6. Research Methodology And Data Analysis:

### 2.6.1. Run test

The runs test (also called Wald–Wolfowitz test after Abraham Wald and Jacob Wolfowitz) is a non-parametric statistical test that checks a randomness hypothesis for a two-valued data sequence. More precisely, it can be used to test the hypothesis that the elements of the sequence are mutually independent.

A "run" of a sequence is a maximal non-empty segment of the sequence consisting of adjacent equal elements. For example, the sequence "++++-----+++++-----" consists of six runs, three of which consist of +'s and the others of -'s. The run test is based on the null hypothesis that the two elements + and - are independently drawn from the same distribution.

We will code values above the median as positive and values below the median as negative. A run is defined as a series of consecutive positive (or negative) values. The runs test is defined as:

$H_0$  = the sequence was produced in a random manner

$H_1$  = the sequence was not produced in a random manner

Test: The test statistic is

$$\text{Statistic: } \frac{R - \mu_R}{\sigma_R} \rightarrow Z: N(0,1) \quad (3)$$

where  $R$  is the observed number of runs,  $\mu_R$  is the expected number of runs, and  $\sigma_R$  is the standard deviation of the number of runs. The values of  $R$  and  $\sigma_R$  are computed as follows:

$$\mu_R = \frac{2(n_1 n_2)}{n_1 + n_2} + 1 \quad (4)$$

$$\sigma_R = \sqrt{\frac{2n_1 n_2 [2(n_1 n_2) - n_1 - n_2]}{(n_1 + n_2 - 1)(n_1 + n_2)^2}} = \sqrt{\frac{(\mu_R - 1)(\mu_R - 2)}{n_1 + n_2 - 1}} \quad (5)$$

where  $n_1$  and  $n_2$  are the number of positive and negative values in the series. [17]

### 2.6.2. Logistic Regression:

For a binary response variable  $y$ , denote its two categories by 1 and 0. Commonly the generic terms success and failure are used for these two outcomes.

#### Linear Probability Model

For a single explanatory variable, the simple model

$$P(y = 1) = \alpha + \beta X \quad (6)$$

implies that the probability of success is a linear function of  $x$ . This is called the linear probability model. This model is simple but often inappropriate.

#### Multiple Logistic Regressions

Logistic regression can handle multiple predictors. The multiple logistic regression model has the form

$$\text{Logit } [P(y = 1)] = \alpha + \beta_1(x_1) + \beta_2(X_2) + \dots + \beta_i(X_i) \quad (7)$$

The formula for the probability itself is

$$P(y = 1) = \frac{\alpha + \beta_1(x_1) + \beta_2(X_2) + \dots + \beta_i(X_i)}{1 + e^{(\alpha + \beta_1(x_1) + \beta_2(X_2) + \dots + \beta_i(X_i))}} \quad (8)$$

Exponentiating a beta parameter provides the multiplicative effect that predictor on the odds, controlling for the other variables. The farther a  $\beta_i$  falls from 0, the stronger the effect of the predictor  $x_i$ , in the sense that the odds ratio falls farther from 1. [18]



**RESULTS AND DISCUSSION**

To investigate the factors which affected on price bubble in 50 companies, First it has used Run test to separate bubble companies. Results showed that nearly 50 percent of the firms in these two years had a price bubble. Then the two factors which effects on price bubble were examined. For data analysis Excel and Eviews software have been used.

The final results of the logit regression estimates for 50 companies that the position of bubble has been checked in 2008, is as follows (between 50 companies, 3 companies didn't any transaction in 2008 and 1 company had not announced a free float in 2008):

**Table 1:** Final results of logit regression models estimated in 2008

Possibility	Significant	z	$\sigma$	$\beta$	Dependent variable
0.344	×	-0.94	0.021	-0.020	Free Float
0.554	×	-0.59	0.194	-0.115	$\frac{P}{E}$
0.255		1.13	0.973	1.106	C

Number of obs 46

LR statistic 1.17558

Mc Fadden R-squared 0.01853

Prob (LR statistic) 0.555554

In this method to examine the significance of the model, One of the criteria for meaningful evaluation is, the Likelihood of LR statistic. Regarding the above table, the likelihood of LR statistic equals 0.555554, and it is larger than 0.05, so it indicate that the result does not correspond with reality, and the estimated regression is not significant. Since the value of each variable is greater than 0.05, indicating that the test hypothesis is rejected for both independent variable, And among 50 companies in 2008, free float and P / E didn't effect on the bubble prices. Final results of logit regression models estimated at the same way for 50 companies in 2009, and the result is as follows (between 50 companies, 1 company had not announced a free float in 2009):

**Table 2:** Final results of logit regression models estimated in 2009

possibility	Significant	z	$\sigma$	$\beta$	Dependent variable
0.9093	×	-0.11	0.024	0.002	Free Float
0.1229	×	1.542	0.346	0.534	$\frac{P}{E}$
0.7218		-0.35	1.496	-0.532	C

Number of obs 49

LR statistic 0.081184

Mc Fadden R-squared 3.794365

Prob (LR statistic) 0.149991

Regarding the above table, the likelihood of LR statistic equals 0.149991, and it is larger than 0.05, so it indicate that the result does not correspond with reality, and the estimated regression is not significant. Since the value of each variable is greater than 0.05, indicating that the test hypothesis is rejected for both independent variable, And among 50 companies in 2009, free float and P / E didn't effect on the bubble prices.

**GENERAL RESULTS**

The results show that the variables P / E and the free float of the company's didn't affect on the price bubble in 50 companies in 2008 and 2009. According to the results of the other major factors which effect on price bubbles such as: Poor transparency of information, Low awareness of investors, Government decisions, ( Rates



of exchange, the government subsidies for primary materials,...), A decreasing trend in interest rates [19], Shareholders behavior and international events [20]... The study results are acceptable. Since there is a bubble in the stock market can destroy the power of predicting and actual measurements of stock market, moreover it can mislead investors and

inefficiency in the allocation of resources, the following suggestions are recommended to managers and investors:

1. Existing bubble in the market shows emotional purchases. Therefore, managers are advised to hold training courses in various centers, Transparency and disclosure of information rapidly, to avoid Occurrence of price bubbles in companies listed in Tehran Stock Exchange.
2. In case of a price bubble phenomenon, using tools such as price limits and trading, and also, if necessary, close the corresponding symbols in general and even the temporary closure of the stock exchange, is recommended.
3. It is recommended to investors and financial analysts, for their Patterns of decisions don't rely on just benefit and trends, so they should be more accurate and they have useful information to predict future movements to earn profits of corporations

## REFERENCES

1. Sarbanha, M., Esmail Amiri and M. Molaii neghad, 2010, "Smoothing effect on the formation of price bubbles in Tehran Stock Exchange", Journal sixth - Accounting Research, Second Year
2. Lansing, K., J. ,2007, "Asset Price Bubbles." FRBSF Economic Letter. 2007.32: 1-3. Print
3. Shiller 2005, p. 85 more extensive discussion of status as the earliest bubble on pp. 247–48.
4. Shiller, R ., *Irrational Exuberance*, 2nd ed. (New York: Doubleday, 2005), Ch. 1.
5. Kindleberger, C. and R. Aliber, 2005 [1978] , *Manias, Panics and Crashes. A History of Financial Crises*, New York, ISBN 0-465-04380-1, p. 16.
6. French, Doug 2006, "The Dutch monetary environment during tulipomania" (PDF), *The Quarterly Journal of Austrian Economics* 9 (1): 3–14, doi:10.1007/s12113-006-1000-6. Retrieved on June 24, 2008
7. Greenspan, A., 2002, *Economic volatility; Remarks. Jackson Hole, WY, August 2002*
8. Gilles, & Le Roy, S.F. 1992: " Asset Price Bubbles". In Newman, P. & al, (eds): *The New palgrave Dictionary of money & Finance*, London, 74-76 Stock
9. Komaromi Gyorgy 2004, *Which Stock Market Fluctuations are Bubbles? Research In Economics and PhD Conference in Pavia, 23-25 sep 2004*
10. Ideo, Shingo 2001, *Considering the Free Float – Adjustment of Topix: the need for new index and possible effects of implementation.*
11. Hong kong stock Exchange. 1998. *Free float and market liquidity*, Hong kong stock Exchange report. pp: 30-45
12. Vakili Fard , H., G, Talebnia and M, kyany, 2010, "The relationship between the amount of free float shares in listed companies in Tehran stock price bubbles"; *Journal of Portfolio Management and Financial Engineering*, No. 4
13. Greenwood, R., Nagel Stefan. 2009, "Inexperienced investors and bubble". *Journal of Financial Economics*
14. Nunes, M and D. Silver, S ., *Rational Bubbles in Emerging Stock Markets* , MPRA Paper 2007: 4641: 1-10
15. Bohl M.T. Siklos P.L, 2004, "The present value model of U.S stock prices redux: a new testing strategy and some evidence; the quarterly review of economics and finance 44; 208-223
16. Nasseh, Alireza, Strauss, Jack 2004, *Stock Prices and the dividend discount model: did their relation break down in the 1990s? The Quarterly Review of Economics and Finance* 44, 191-207
17. Mendenhall, W and J, Reinmuth, 1982 , *Statistics for Management and Economics, Fourth Edition*, Duxbury Press.

- 
18. Jarrow, 1995 , Predictive Models of Default Risk in Local Governments.A Logistic Regression, Research in Business Economics , University of Calabria
  19. Asadi, H,. A, Tabrizi, Hussein and Soltani, Asghar, 2008, "Examination of price bubbles at selected companies in Tehran stock exchange, the time period (1991-2005)
  20. Asadi, H, & O, Tavakoli, 2008, Journal of Administrative Sciences and Economics, University of Isfahan, Year 20, No. 2

**LIVING IN THE ICE (INFORMATION TECHNOLOGY, COMMUNICATION & ENTERTAINMENT)  
AGE: SERVING THE GLOBAL VILLAGE THROUGH THE INFORMATION SUPERHIGHWAY***“Portals hit a fortune with a click”*

.....Anonymous

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**ABSTRACT**

*The emergence of the LPG (Liberalization, Privatization & Globalization) era diffused the national boundaries and made the world a global village. This was taken forward with the development of the internet. One of the fast emerging trends, as a by-product of this, is the online shopping by consumers for any product or service that one can imagine. India is catching up and has joined the bandwagon. This paper looks into the penetration of the construct “online shopping in India” with the help of available secondary sources like journal articles, magazines, newspapers, internet etc.*

*The study suggests that online shopping is becoming a craze especially among the youngsters, though this section of the society forms a miniscule portion of the whole Indian internet users. The reasons for the low adaptability of the construct as of now might lie in security and trust aspects of online web sites. This paper will find relevance with marketers, especially the ones who are keen to enter and reach the customer through this latest communication technology.*

*Keywords: Online Shopping, Indian Customers, SWOT, Trust, User-Friendly Web Sites*

**INTRODUCTION**

The emergence of the LPG (Liberalization, Privatization & Globalization) era diffused the national boundaries and made the world a global village. The world today is moving towards the click of a mouse. The advent of internet in 1990s, and later WWW (World Wide Web), changed the way world communicates & functions. Today invariably everything is online and if it is not, it seems to have no existence. Amidst this the latest fad and craze is online shopping. This has forced the organizations to relook into their existing business models and plan a different course of action. Over and above this, we have portals exclusively dedicated to online shopping as their business model. They do not believe in warehousing or storing or having physical premises thus saving huge capital investments. In turn they encash on quick operations and fast delivery by leveraging the Information Technology (IT).

When one buys a product or a service over the internet, instead of going to a traditional brick-and-mortar store, it is called online shopping<sup>4</sup>. The competition for it is not only from numerous portals dedicated to online shopping but also from companies that are selling their products online. Even services like banking, insurance, travel & tourism, job searching, booking movie tickets, railway tickets, air tickets, health care, education, recruitment etc. all have found a hit with the click.

Online shopping became popular during the Internet boom in 1999-2000. Amazon.com, the online bookstore founded by Jeff Bezos, created history by becoming the first bookstore with a presence only on the Internet. Portals such as Yahoo.com and MSN.com followed suit and also started online shopping channels where people could buy more than just books. Indiatimes.com and Rediff.com came up with similar options for the Indian consumer<sup>5</sup>.

In this paper the authors look at the penetration of online shopping in India by portals exclusively for online selling. Their business is driven by instant reviews (likes, dislikes or descriptive experiences shared online) of their products by users. Also studies show that youngsters prefer buying online for various reasons like comfort of own space, time, 24\*7 availability, discounts, variety, 30 day return back policies, etc. The marketers ensure

<sup>4</sup> What is Online Shopping? Available at [http://articles.economictimes.indiatimes.com/2006-12-25/news/27439230\\_1\\_online-shopping-online-presence-online-purchase](http://articles.economictimes.indiatimes.com/2006-12-25/news/27439230_1_online-shopping-online-presence-online-purchase) as on 10th February 2014

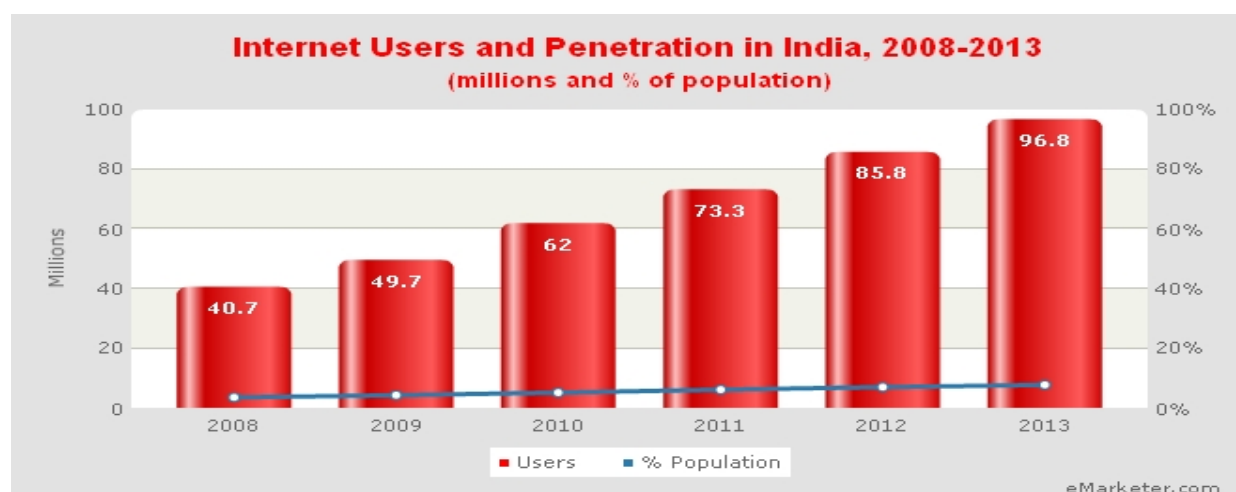
<sup>5</sup> Ibid

that once an online shopper remains an online shopper. And this, they are able to achieve by maintaining an updated customer data base and its follow up.

### THE INDIAN SCENARIO

India has an Internet base of around 150 million and ranks third<sup>6</sup> as of August, 2013. According to the Internet & Mobile Association of India, e-commerce transactions, not counting travel, crossed INR 2,300 crore or 10% of the organized retail market in 2006-07. India's e-commerce market stood at \$2.5 billion (Refer Figure 1: Internet Users: 49.7 Million; 4.3% of Total Population: 1.2 Billion) in 2009, reached \$8.5 billion in 2012 and grew at a staggering 88<sup>7</sup> % (96.8 Million) in 2013 to touch \$16 billion, courtesy the increasing Internet penetration and availability of more payment options, according to a survey by ASSOCHAM<sup>8</sup>. The survey estimates the country's e-commerce market to reach \$56 billion by 2023, driven by rising online retail<sup>9</sup>. India boasts of the fastest growing online customer base in the world, fuelled by mobile and PC desktop Web adoption along with the largest potential audience in the world for social networks<sup>10</sup>. While online shopping is still not very big in India, the numbers are growing every year (figure 1).

**Figure 1: Growth of Internet Users in India**



Source<sup>11</sup>: <http://onlineadnetwork.blogspot.in/2009/03/internet-use-across-globe-part-3.html>

The demographic breakup of the Indian population based on the age-wise analysis<sup>12&13</sup> revealed that:

- 35 per cent of online shoppers are aged between 18 years and 25 years,

<sup>6</sup> India is now world's third largest Internet user after U.S., China. Available at <http://www.thehindu.com/sci-tech/technology/internet/india-is-now-worlds-third-largest-internet-user-after-us-china/article5053115.ece> as on 10th February 2014

<sup>7</sup> India's e-commerce market rose 88% in 2013: Survey (2013). Available at [http://articles.economictimes.indiatimes.com/2013-12-30/news/45711192\\_1\\_e-commerce-market-online-shoppers-survey](http://articles.economictimes.indiatimes.com/2013-12-30/news/45711192_1_e-commerce-market-online-shoppers-survey) as on 10th February 2014

<sup>8</sup> Associated Chambers of Commerce and Industry of India

<sup>9</sup> India's e-commerce market rose 88% in 2013: Survey (2013). Available at [http://articles.economictimes.indiatimes.com/2013-12-30/news/45711192\\_1\\_e-commerce-market-online-shoppers-survey](http://articles.economictimes.indiatimes.com/2013-12-30/news/45711192_1_e-commerce-market-online-shoppers-survey) as on 10th February 2014

<sup>10</sup> Malhotra, Rishi (2012). 5 Ways To Engage India's Fast Growing Online Customer Base. Available at <http://www.forbes.com/sites/ciocentral/2012/06/22/5-ways-to-engage-indias-fast-growing-online-customer-base/> as on 11th February 2014

<sup>11</sup> Internet Use Across the Globe: Part 3. Available at <http://onlineadnetwork.blogspot.in/2009/03/internet-use-across-globe-part-3.html> as on 10th February 2014

<sup>12</sup> Comscore 2013 India Future in Focus: Internet Population In India At 74M. available at <http://www.medianama.com/2013/10/223-comscore-2013-india-future-in-focus-internet-population-in-india-at-74m/> as on 10th February 2014

<sup>13</sup> India's e-commerce market rose 88% in 2013: Survey (2013). Available at [http://articles.economictimes.indiatimes.com/2013-12-30/news/45711192\\_1\\_e-commerce-market-online-shoppers-survey](http://articles.economictimes.indiatimes.com/2013-12-30/news/45711192_1_e-commerce-market-online-shoppers-survey) as on 10th February 2014

- 55 per cent between 26 years and 35 years,
- 8 per cent in the age group of 36-45 years,
- While only 2 per cent are in the age group of 45-60 years.
- Besides, 65 per cent of online shoppers are male while 35 per cent are female.

This forms close to 10 per cent of Internet penetration in India which throws a very big opportunity for online retailers to grow and expand as future of Internet is seemingly very bright.

As a testimony to the very fast growing online shopping in India, the e-commerce sites number crossed 600 only in 2012<sup>14</sup> from a meager start of 100. This exponential growth can be attributed to the inherent strengths of the same (Refer Table 2 for SWOT). Indiafreestuff.in<sup>15</sup> site ranks (Refer Table 1) these e-commerce sites and comes out with a list based on votes (which are averaged) given by its viewers. After takeover of letsbuy.com now flipkart is largest player of e-commerce of India.

**Table 1: List & Rank of Online sites in India**

S.No.	Online Site	Average	Rank (Lower average comes first)
1	Flipkart	4.84	1
2	Ebay	4.88	2
3	Tradus.in	5.32	3
4	Shopclues.com	5.39	4
5	Myntra	5.45	5
6	Homeshop18	5.82	6
7	Yebhi	5.88	7
8	Snapdeal	5.93	8
9	Pepperfry	5.99	9
10	Infibeam.com	6.10	10

Source: <http://indiafreestuff.in/top-10-online-shopping-sites-in-india-html/>

The plethora of products include Air-conditioners, Apparels, Bags, Books, Cameras, CDs & DVDs, Clothes, Computers & their accessories, Cosmetics, Electronics, Furniture, Gifts, Home & Kitchen Appliances, Home décor, Ipods, Jewellery, Laptops, Mobile phones & mobile accessories, Movies, MP3 players, Perfumes, Refrigerators, Shoes, Televisions, Toys, Used Cars & Bikes, Washing-machines, Watches, and products from a host of other categories at discounted prices and free shipping at times.

Amazon.in, the world leader in e-commerce market recently started operation in India. SnapDeal offers everything from local daily deals on restaurants, spas, travel to online products deals. Myntra.com is leading online retailer of lifestyle and fashion products. HomeShop18, a venture of the Network18 Group<sup>16</sup> launched India's first 24 hour Home Shopping TV channel and received the 'Best shopping site' award from PC World Magazine in 2008.

Sahney et al (2008)<sup>17</sup>, state that the current retail marketing trends show a shift from traditional means of a store format to an increased use of technology via the internet. Thus business is moving online. But in a country like

<sup>14</sup> Top 10 Online Shopping Sites in India – Best Indian Online Shopping Websites (2013). Available at <http://indiafreestuff.in/top-10-online-shopping-sites-in-india-html/> as on 6<sup>th</sup> February 2014

<sup>15</sup> Ibid

<sup>16</sup> Network18 operates India's leading business news television channels – CNBC TV18 and CNBC Awaaz

<sup>17</sup> Sahney, S., Shrivastava, A., & Bhimalingam, R. (2008). Consumer Attitude Towards Online Retail Shopping in the Indian Context. The Icfai University Journal of Consumer Behavior , III ( 4), 34-68

India, online experiences are still looked up as complex and uncomfortable. This is evident when one sees that online buying in India is popular only among the select urban youth.

### **SWOT ANALYSIS OF THE ONLINE MARKET PLACE**

The developments in communication technology have created a real time access to knowledge about customer, suppliers and the competition; therefore we are now witnessing instantaneous implications over market performances with respect to changing buying behavior, market channel strategies, pricing etc and numerous other strategic issues. “We need to go where they (consumers) are on the web and that is social media, though, it will be a gradual process over the next decade<sup>18</sup>.” says Anuradha Aggarwal, Vice President, Brand and Consumer Insights, Vodafone. Moreover, “The consumer will then spend his time and energy, not the marketer’s money, to reach out to the masses,” says Krishna Kumar, CEO, Media2Win<sup>19</sup>.

Most of the studies done on online shopping have emphasized on what factors determine that the consumer goes for online shopping but this paper explores the concept mainly from the marketers perspective by forwarding a SWOT of the online marketplace for a quick reference. The marketers can work out a strategy on ‘how to pitch in’, with the help of the same. For example the efficient distribution chain and logistics with warehouses geographically spread in each country so the goods could be dispatched faster and with lower cost make Amazon the world’s best online market place<sup>20</sup>. According to the business model of online marketers the online market place acts as a middleman between sellers and buyers, who bid and sell items in this space. Table 2 gives a quick summary of the Strengths, Weaknesses, and Opportunities & Threats (SWOT) of this new online market place.

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<sup>18</sup> Subramanian, Anusha (September 19 2010). India Inc.’s Tryst with Social Media Companies are promoting brands through social networks but it’s early days yet. Available at <http://www.highbeam.com/doc/1P2-25859528.html> as on 12th February 2014

<sup>19</sup> Ibid

<sup>20</sup> Strategic Management Insight (2013). Available at <http://www.strategicmanagementinsight.com/swot-analyses/amazon-swot-analysis.html> as on 6th February 2014

Table 2: SWOT Analysis of online marketplace

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>• Fast with no long queues and helps avoid crowds</li> <li>• Easy, flexible and convenient especially with hectic schedules</li> <li>• It saves time and allows consumers to do other things</li> <li>• Money saving with Aggressive online discounts &amp; Discount coupons and competitive pricing</li> <li>• Interesting 24*7 shopping experience</li> <li>• Shopping from Home facility &amp; delivery at your doorstep</li> <li>• Rich product availability with specifications &amp; ample information</li> <li>• Availability of abundant online options. Customers can make comparisons between different products and services instantly</li> <li>• Great deals every day or week</li> <li>• Cost leadership strategy example Amazon</li> <li>• Superior quality services and products: reliable, &amp; convenient</li> <li>• There are economies of scale after the initial heavy investment to gain IT and customer relationship management (CRM) knowledge and skills</li> <li>• Customer Data Base Management</li> <li>• Localization</li> <li>• Payment system</li> <li>• Brand reputation</li> <li>• Dissatisfied customer can return the product (collected at doorstep) free of charge generally within 30 days or whatever is the company policy</li> </ul>	<ul style="list-style-type: none"> <li>• Only online presence: the touch &amp; feel customer cannot see and touch the purchases and thus buying decision might not be instant</li> <li>• Interpersonal interactions are given more importance in developing countries as they are characterized by poor infrastructure and communication networks</li> <li>• The unavailability of legal infrastructure support for e-commerce Web sites further instills fear of financial loss</li> <li>• Selling at zero margins: hurts firm's profits</li> <li>• High fees for the sellers</li> <li>• No further growth strategy as unsure whether they should become a retailer or to introduce new products and services or developing their own products or acquiring new business.</li> <li>• Negative publicity: Amazon was loathed for its tax avoidance in the countries (UK and US) where it earns most of its revenues. Amazon is also criticized for poor warehouse conditions for workers, anti-competitive actions, price discrimination and etc.</li> </ul>

OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>• Online payment system</li> <li>• Can release more of its own brand products and services</li> <li>• Increase services and product portfolio through acquisitions</li> <li>• Open more online stores in other countries</li> <li>• Physical presence: Smaller store-warehouse outlets could serve as warehouses, distribution centers, the stores where customers could pick up their purchases and physical contact points.</li> <li>• Growing number of mobile shoppers</li> <li>• Become a retailer</li> <li>• Ever increasing internet user population in India</li> <li>• Acceptance of online shopping as one of the major ways in the mind set of the customers</li> <li>• Strengthening the services and security aspects of online transactions as Indian customers are influenced by the service and trust attributes</li> <li>• The world is your customer base</li> <li>• Adopting local language</li> <li>• Rising fuel prices &amp; Traffic snarls</li> <li>• Efficient distribution chain and logistics can help in delivering fast shipping with low price</li> <li>• Many free additional features with its services</li> </ul>	<ul style="list-style-type: none"> <li>• Online security &amp; trust because of online threats</li> <li>• Those who are reluctant to shop online cited reasons like preference to research products and services online (30 per cent), finding delivery costs too high (20%), fear of sharing personal financial information online (25%) and lack of trust on whether products would be delivered in good condition (15%), while 10 per cent do not have a credit or debit card<sup>21</sup></li> <li>• Strategic alliances: it faces serious challenges from strategic alliances. For example, the strategic alliance between Apple and e-books content providers</li> <li>• Increased competition: regional &amp; global</li> <li>• Exchange rates if you become global</li> <li>• Legislation against tax avoidance: how huge multinational companies, such as Amazon, avoid paying taxes for the countries they operate in. Eventually, governments will pass a legislation requiring that all companies would pay a fair share of taxes</li> <li>• Lawsuits: negative attention from UK and U.S. authorities for tax avoidance and is subject for litigations and fines</li> <li>• Regional low cost online retailers: Regional low cost online retailers could outrival on faster and cheaper shipping, localized product offering and better knowledge about home market</li> </ul>

*Source: The table 2 is a compilation by the authors from different secondary sources*

Indian customers may be net-savvy, but a question worth pondering is, are they willing to use online shopping models? The online marketplace is different from the regular brick and mortar market and trust plays an important role in building relationship with customers in this faceless online environment. There are many factors that dictate the customers' perspective to venture into online shopping. This perspective is either the biggest opportunity or the biggest threat to this market.

In Gupta et al (2008)<sup>22</sup> results showed that young adults of India are mainly online surfers and not online shoppers. These people have a lack of knowledge and experience with online shopping. Therefore, a very small percentage of these young adults shop online and they purchase only low-cost items. They do not trust online shopping and feel that lack of touch and feel discourage their online shopping. But web site quality which includes (i) design (e.g., organization, quality, appearance, and aesthetics); (2) content (e.g., information, content quality, and specific content); (3) entertainment; (4) ease of use (e.g., navigation and usability); (5) reliability; and (6) interactivity etc. do give visitors a reason to have confidence in the company.

<sup>21</sup> What is Online Shopping (2013)? Available at [http://articles.economictimes.indiatimes.com/2013-12-30/news/45711192\\_1\\_e-commerce-market-online-shoppers-survey\\_as](http://articles.economictimes.indiatimes.com/2013-12-30/news/45711192_1_e-commerce-market-online-shoppers-survey_as) on 10th February 2014

<sup>22</sup> Gupta, N., Handa, M., & Gupta, B. (2008). Young Adults of India-Online Surfers or Online Shoppers. *Journal of Internet Commerce*, 7 (4), 425-444



According to Dholakia & Zhao (2010)<sup>23</sup> “ease of finding what you are looking for” and “clarity of product information” are the two most important attributes for generating positive ratings of overall look and design of the site. Moreover, they further state that order fulfillment variables, particularly on-time delivery, dominate the effects on overall customer evaluations and satisfaction.

Rishi (2008)<sup>24</sup> in his study highlights that convenience, accessibility, scope, attraction, reliability, experience and clarity are the important factors considered by the online shoppers. Though factors affecting online shopping in India are similar to those of worldwide but some of them are specific as the penetration of IT and its adoption in India have been slow such as scope and accessibility.

The study conducted by Magesh (2011)<sup>25</sup> for Chennai city concluded that the attitudes towards online shopping and intention to shop online are not only affected by ease of use, usefulness and enjoyment, but also by exogenous factors like saving time, comparison shopping, product characteristics, previous online shopping experiences, easy to access and trust in online shopping.

Khare & Khare (2011)<sup>26</sup> in their paper mention, that the modern technology-savvy breed seek interactive facilities, high quality services, detailed information on products, and easy to follow instructions. Moreover, technology reduces operating costs and improves customer service. In the same paper most of the authors mentioned, share a consensus on the following (listed chronologically):

- Bakos (1998) suggests that e-commerce Web sites effectively bring together buyers and sellers on a single platform. However, customers’ intention to purchase online depends on their acceptability of Internet as a delivery channel.
- Szymanski and Hise (2000) suggested four Web dimensions, namely convenience, merchandizing, site design, and financial security, for increasing customer satisfaction.
- Trust and reliability are integral components of online services (Bonn, Furr, & Susskind, 1998; Claycomb & Martin, 2001).
- The decision to purchase is linked to quality, credibility, reliability, and trust factors (Patterson & Smith, 2001; Smith, 2004).
- In a similar vein, H. Kim (2005) suggested that online customer satisfaction depends on: after sales service, purchase, price attractiveness, product information, customer service, site design, product attractiveness, payment method, site information, and log-on convenience.
- Emergence of online intermediaries has made it possible for customers to explore Web sites at their convenience and leisure (Lu, Deng, & Wang, 2007).
- Customers perceive transactions through the Internet to be insecure and prefer face-to-face interaction (Srijumpa et al., 2007; Thao & Swierczek, 2008).
- Customer satisfaction depends on the informative, attractive, and interactive features identified product information, pricing information, online booking facility, and quick Web page load time apart from accessibility, navigation, design, reliability, and customization features (DeLone & McLean, 1992; Srirojanant & Thirkell, 1998; Law & Bai, 2008).
- Wen (2009) stated that trust, a valuable catalyst, relates to the reliability attribute of the service provider and is important for success and customer relationship in an uncertain online

<sup>23</sup> Dholakia, R. R., & Zhao, M. (2010). Effects of Online Store Attributes on Customer Satisfaction and Repurchase Intentions. *International Journal of Retail & Distribution Management* , 38 (7), 482-496.

<sup>24</sup> Rishi, B. J. ( 2008). An Empirical Study of Online Shopping Behaviour: A Factor Analysis Approach. *Journal of Marketing & Communication* , 3 (3), 40-49

<sup>25</sup> Magesh, R. (2011). Preferences towards Online Shopping among Urban Population with special reference to Chennai City. *Advances In Management* , 4 (1), 30-37

<sup>26</sup> Khare, A., & Khare, A. (2011). Blending Information Technology in Indian Travel and Tourism Sector. *Services Marketing Quarterly* , 32 (4), 302–317

environment. He was supported by many other authors. Attitude, perception and satisfaction were also important factors in determining customers' online purchase intention.

Sharma (2011)<sup>27</sup> says that online strategy building requires a series of steps and consistency in reviewing can bring more effectiveness. This review of the implemented model will offer a chance to modify effectiveness and a simultaneous feedback from related customers can prove to be an important input.

Gehrt et al (2012)<sup>28</sup> make a note that India currently lags in terms of credit cards held so there may be some limits to online shopping potential.

Khare & Rakesh (2011)<sup>29</sup> studied Indian students' intention to purchase online and found that it is influenced by utilitarian value, attitude toward online shopping, availability of information, and hedonic values.

Results in Khare et al (2012)<sup>30</sup> reveal that online shopping behavior is influenced by normative beliefs, gender, and age. Consumers' acceptance of online shopping Web site depends on social norms and accepted retail formats are more popular. People are comfortable using traditional retail channels for shopping as they appear secure.

In 2012 Nielsen's study had reported that over 45,000 Indians would join social networking sites each day over the next six months. According to the study, 80% of Indian social media users spend more than 15 minutes on sites daily. In fact, with almost 50 million registered users, India is the second most-represented country on Facebook and the sixth most-represented country on Twitter<sup>31</sup>. All this has been achieved in less than 5 years despite a national environment characterized by weak IT infrastructure and a high touch and feel consumer culture<sup>32</sup>. This defines the scope of utilizing this medium of communication for marketing.

Kumar & Mirchandani (2012)<sup>33</sup> mention a Seven-Step Framework for Social Media Marketing to use social networking for online selling:

Step 1: Monitor the conversations;

Step 2: Identify influential individuals who can spread messages;

Step 3: Identify the factors shared by influential individuals;

Step 4: Locate those potential influencers who have interests relevant to the campaign;

Step 5: Recruit those influencers with interests relevant to the campaign to talk about the company's product or service;

Step 6: Incentivize those influencers to spread positive WOM (Word of Mouth) about the product or service; and

Step 7: Reap the rewards from increasingly effective social media campaigns.

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<sup>27</sup> Sharma, A. (2011). Take-off of online marketing: casting the next generation strategies. *Business Strategy Series* , 12 (4), 202-208

<sup>28</sup> Gehrt, K. C., Rajan, M. N., Shainesh, G., Czerwinski, D., & O'Brien, M. (2012). Emergence of online shopping in India: shopping orientation segments. *International Journal of Retail & Distribution Management* , 40 (10), 742-758

<sup>29</sup> Khare, A., & Rakesh, S. (2011). Antecedents of Online Shopping Behavior in India: An Examination. *Journal of Internet Commerce* , 10, 227-244

<sup>30</sup> Khare, A., Khare, A., & Singh, S. (2012). Attracting Shoppers to Shop Online—Challenges and Opportunities for the Indian Retail Sector. *Journal of Internet Commerce* , 11, 161-185

<sup>31</sup> Malhotra, R. (2012, June 22). 5 Ways To Engage India's Fast Growing Online Customer Base. Available at <http://www.forbes.com/sites/ciocentral/2012/06/22/5-ways-to-engage-indias-fast-growing-online-customer-base> as on 10th February 2014

<sup>32</sup> Unknown. (2001). Business Case Study From India: Acquiring e competency: A Success Story. Available at <http://www.tradeforum.org/Business-case-study-from-India/> as on 6<sup>th</sup> February 2014

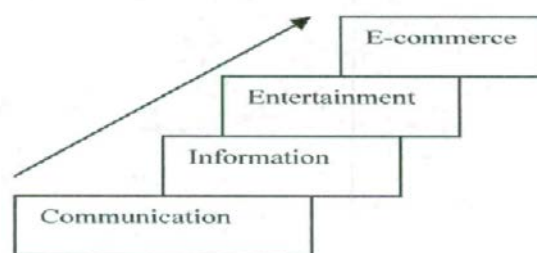
<sup>33</sup> Kumar, V. and Mirchandani, R. (September 18, 2012). Increasing the ROI of Social Media Marketing, Fall 2012. Available at <http://sloanreview.mit.edu/article/increasing-the-roi-of-social-media-marketing/> as on 10<sup>th</sup> February 2014

These systematic steps can help the online marketers to use this upcoming media as one of the important platforms to not only showcase their products but also for actually selling them. Thus social networking or media can be another spring board to take a big leap in the area of online shopping. 70% of companies are using some kind of social media<sup>34</sup>.

### THE FUTURE: ONLINE MARKETS

Though, hardly a decade old in India, online shopping has been voted as the best technological advancement of the 21<sup>st</sup> century presenting a new delivery channel for Indian customers. Its exponential growth has been attributed to loads of features discussed in the section on SWOT and the overwhelming response and willingness to adopt e-commerce by the young (age group 20–45 years) techno-savvy generation. Figure 2 depicts the evolution of internet usage starting from simple communication to e-commerce.

**Figure 2: Hierarchy of Internet Usage<sup>35</sup>**



Source: Adapted from eTechnologyGroup@IMRB (exchange4media ize stats. 2007) in Gupta et al (2008)

Online fashion retailers Jabong has received more than \$100 mn from existing and new investors while Myntra raised more than \$50 mn in a funding round to keep fuelling their aggressive expansion and compete better with the likes of Flipkart and Amazon<sup>36</sup>. This is a testimony to the growing confidence of the investors, marketers and the online shoppers, in online shopping which is slated to be the next big market place of the future, after the retail boom.

According to Google, the Great Online Shopping Festival (GOSF), held in December 2013, was a big success, both in terms of site visits (the website gosf.in received over 2 million unique visitors both from metros and non-metros, double of last year; 120% jump in traffic) and revenue (3.5 times growth). 62% of the people who visited the GOSF site were between 18 to 34 years old and 46% were females. All leading partners saw an increase of three to four times growth in daily sales. Mobiles and tablets were the top selling categories, followed closely by footwear in terms of volume.<sup>37</sup> This is a testament to the future potential of online shopping in India.

People are ready to experiment with any product, from low value items to high value purchases, in online. This indicates a paradigm shift from the 'touch and feel' customer to a 'see and select' customer. The confidence for this comes from timely delivery, the buyback policies or cash return policies of these online stores to name a few.

<sup>34</sup> Benady, D. (2013, March). *The Architecture of Social Success. Marketing*, 6, pp. 30-32.

<sup>35</sup> Gupta, N., Handa, M., & Gupta, B. (2008). Young Adults of India-Online Surfers or Online Shoppers. *Journal of Internet Commerce*, 7 (4), 425-444

<sup>36</sup> Jabong, Myntra's expansion plans get boost from large investments. Available at <http://www.livemint.com/Industry/L6rY5g8NNpWfb7IPK0aOZP/Jabong-Myntras-expansion-plans-get-boost-from-large-invest.html> as on 12th feb 2014

<sup>37</sup> E-commerce sites ride high on Google online shopping fest. Available at [http://articles.timesofindia.indiatimes.com/2013-12-17/internet/45294009\\_1\\_the-gosf-google-india-great-online-shopping-festival](http://articles.timesofindia.indiatimes.com/2013-12-17/internet/45294009_1_the-gosf-google-india-great-online-shopping-festival) as on 12th February 2014

The easy access to Internet at their workplace, ease of operation, web site layout and design, user-friendly features, flexibility and availability of product in their own space and time and many more make this whole concept the place where future is directed to.

One of the untapped areas is the older customers, who are afraid to visit shopping Web sites. The online marketers should create surveys to get a feedback from their existing young users and the potential old users to make the whole online shopping a better experience. Moreover, getting affirmation about the transactions from the firm on the mobile phones creates trust for these services according to Khare & Khare (2011)<sup>38</sup>.

The numerous data on online shopping forces us to believe that the online market place is the place of future and is definitely here to stay. It reiterates the scope both for the marketers and the shoppers with respect to online shopping. The data is very promising towards the development of this construct in future. The strengths (Refer Table 2 for SWOT) can be leveraged to grow and create more opportunities; the weaknesses listed are areas of improvement to be dealt with, for enhancing the future scope of online shopping.

India is a huge market and the growing penetration of internet and simultaneous acceptance of online shopping will be the face of future. Addressing the various concerns of weaknesses and threats may help in improving online services and building relationship with customers. The future of the online industry depends on the development of appropriate strategies for expanding the marketplace, the issues of market selection, perceived value of information and pricing strategies according to Trudell (1991)<sup>39</sup>.

Inevitably when technology enables and changes consumer behavior quickly, many firms struggle to understand the new market dynamics at play. No longer are people expected to browse round and physically check out the shops and any deals they have - mobile apps can help plan shopping trip beforehand with voucher offers; location technology can alert shoppers to deals on their devices at any stage, and social marketing techniques can help flag up promotions beforehand, and then track engagement through social networks afterwards<sup>40</sup>. Thus with the advent of mobile shopping there is no looking back for this online marketplace. And marketers who refuse to see the obvious will only do so at their own peril. Rather they need to explore how to be a part of it.

## REFERENCES

1. Benady, D. (2013, March). The Architecture of Social Success. *Marketing* , 6, pp. 30-32.
2. *Comscore 2013 India Future in Focus: Internet Population In India At 74M*. (2013, October 31). Retrieved February 10, 2014, from <http://www.medianama.com/>: <http://www.medianama.com/2013/10/223-comscore-2013-india-future-in-focus-internet-population-in-india-at-74m/>
3. Dholakia, R. R., & Zhao, M. (2010). Effects of Online Store Attributes on Customer Satisfaction and Repurchase Intentions. *International Journal of Retail & Distribution Management* , 38 (7), 482-496.
4. *E-commerce Sites Ride High on Google Online Shopping Fest*. (2013, December 17). Retrieved February 12, 2014, from [www.articles.timesofindia.indiatimes.com](http://www.articles.timesofindia.indiatimes.com): [http://articles.timesofindia.indiatimes.com/2013-12-17/internet/45294009\\_1\\_the-gosf-google-india-great-online-shopping-festival](http://articles.timesofindia.indiatimes.com/2013-12-17/internet/45294009_1_the-gosf-google-india-great-online-shopping-festival)
5. Gehrt, K. C., Rajan, M. N., Shainesh, G., Czerwinski, D., & O'Brien, M. (2012). Emergence of Online Shopping in India: Shopping Orientation Segments. *International Journal of Retail & Distribution Management* , 40 (10), 742-758.
6. Gupta, N., Handa, M., & Gupta, B. (2008). Young Adults of India-Online Surfers or Online Shoppers. *Journal of Internet Commerce* , 7 (4), 425-444.

<sup>38</sup> Khare, A., & Khare, A. (2011). Blending Information Technology in Indian Travel and Tourism Sector. *Services Marketing Quarterly* , 32 (4), 302-317

<sup>39</sup> Trudell, L. (1991). Marketing Online Services: Product, Market and Strategy. *Online Information Review*, 15 (3/4), 207 - 225

<sup>40</sup> Unknown (2013). Steps To Social Marketing Success: Creating Emerging Marketing Strategies In The Digital Era. *Strategic Direction* Vol. 29 No. 7, pp. 17-20

7. *India is Now World's Third Largest Internet User After U.S., China.* (2013, August 24). Retrieved February 10, 2014, from <http://www.thehindu.com/sci-tech/technology/internet/india-is-now-worlds-third-largest-internet-user-after-us-china/article5053115.ece>
8. *India's e-commerce Market Rose 88% in 2013: Survey.* (2013, December 30). Retrieved February 10, 2014, from [www.articles.economictimes.indiatimes.com](http://www.articles.economictimes.indiatimes.com/2013-12-30/news/45711192_1_e-commerce-market-online-shoppers-survey): [http://articles.economictimes.indiatimes.com/2013-12-30/news/45711192\\_1\\_e-commerce-market-online-shoppers-survey](http://articles.economictimes.indiatimes.com/2013-12-30/news/45711192_1_e-commerce-market-online-shoppers-survey)
9. *Internet Use Across the Globe: Part 3.* (2009, March, Wednesday 11). Retrieved February 10, 2014, from [www.onlineadnetwork.blogspot.in](http://onlineadnetwork.blogspot.in/2009/03/internet-use-across-globe-part-3.html): <http://onlineadnetwork.blogspot.in/2009/03/internet-use-across-globe-part-3.html>
10. *Jabong, Myntra's Expansion Plans Get Boost From Large Investments.* (2014, February Thursday, 6). Retrieved February 12, 2014, from <http://www.livemint.com/2014/02/06/industry/L6rY5g8NNpWfb7lPK0aOZP/Jabong-Myntras-expansion-plans-get-boost-from-large-invest.html> as on 12th feb 2014
11. Khare, A., & Khare, A. (2011). Blending Information Technology in Indian Travel and Tourism Sector. *Services Marketing Quarterly* , 32 (4), 302–317.
12. Khare, A., & Rakesh, S. (2011). Antecedents of Online Shopping Behavior in India: An Examination. *Journal of Internet Commerce* , 10, 227–244.
13. Khare, A., Khare, A., & Singh, S. (2012). Attracting Shoppers to Shop Online—Challenges and Opportunities for the Indian Retail Sector. *Journal of Internet Commerce* , 11, 161–185.
14. Kumar, V., & Mirchandani, R. (2012, September 18). *Increasing the ROI of Social Media Marketing.* Retrieved February 10, 2014, from [www.sloanreview.mit.edu](http://www.sloanreview.mit.edu/article/increasing-the-roi-of-social-media-marketing/): <http://www.sloanreview.mit.edu/article/increasing-the-roi-of-social-media-marketing/>
15. Magesh, R. (2011). Preferences Towards Online Shopping Among Urban Population with Special Reference to Chennai City. *Advances In Management* , 4 (1), 30-37.
16. Malhotra, R. (2012, June 22). *5 Ways To Engage India's Fast Growing Online Customer Base.* Retrieved February 10, 2014, from [www.forbes.com](http://www.forbes.com/sites/ciocentral/2012/06/22/5-ways-to-engage-indias-fast-growing-online-customer-base/): <http://www.forbes.com/sites/ciocentral/2012/06/22/5-ways-to-engage-indias-fast-growing-online-customer-base/>
17. Rishi, B. J. ( 2008). An Empirical Study of Online Shopping Behaviour: A Factor Analysis Approach. *Journal of Marketing & Communication* , 3 (3), 40-49.
18. Sahney, S., Shrivastava, A., & Bhimalingam, R. (2008). Consumer Attitude Towards Online Retail Shopping in the Indian Context. *The Icfa University Journal of Consumer Behavior* , III ( 4), 34-68.
19. Sharma, A. (2011). Take-off of Online Marketing: Casting the Next Generation Strategies. *Business Strategy Series* , 12 (4), 202-208.
20. *Strategic Management Insight* . ( 2013, February 18). Retrieved February 6, 2014, from [www.strategicmanagementinsight.com](http://www.strategicmanagementinsight.com/analyses/amazon-swot-analysis.html): <http://www.strategicmanagementinsight.com/analyses/amazon-swot-analysis.html>
21. Subramanian, A. (2010, September 19). *India Inc.'s Tryst with Social Media: Companies Are Promoting Brands Through Social Networks But it's Early Days Yet.* (B. Today, Producer) Retrieved February 12, 2014, from [www.highbeam.com](http://www.highbeam.com/doc/1P2-25859528.html): <http://www.highbeam.com/doc/1P2-25859528.html>
22. *Top 10 Online Shopping Sites in India – Best Indian Online Shopping Websites.* (2013, December 21). Retrieved February 6, 2014, from [www.indiafreestuff.in](http://indiafreestuff.in/top-10-online-shopping-sites-in-india.html): <http://indiafreestuff.in/top-10-online-shopping-sites-in-india.html>
23. Trudell, L. (1991). Marketing Online Services: Product, Market and Strategy. *Online Information Review* , 15 (3/4), 207 - 225.

- 
24. Unknown. (2001). *Business Case Study From India: Acquiring e competency: A Success Story*. Retrieved February 6, 2014, from [www.tradeforum.org](http://www.tradeforum.org): <http://www.tradeforum.org/Business-case-study-from-India/>
  25. Unknown. (2013). Steps to Social Marketing Success: Creating Emerging Marketing Strategies in the Digital Era. *Strategic Direction* , 29 (7), 17-20.
  26. *What is Online Shopping?* . (2006, December 25). Retrieved February 10, 2014, from [www.articles.economictimes.indiatimes.com](http://articles.economictimes.indiatimes.com): [http://articles.economictimes.indiatimes.com/2006-12-25/news/27439230\\_1\\_online-shopping-online-presence-online-purchase](http://articles.economictimes.indiatimes.com/2006-12-25/news/27439230_1_online-shopping-online-presence-online-purchase)

## MOTHERS' EMPOWERMENT LEVEL AND ITS IMPACT ON THEIR CHILDREN'S EDUCATIONAL ATTAINMENTS: AN EMPIRICAL STUDY ON MUSLIMS

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### ABSTRACT

*The authors designed and carried out the study with objectives of estimating the empowerment level of Muslim women living in a socioeconomically backward setting and to find out the impact of mothers' empowerment on their children's educational attainments. The sample comprises of 84 Muslim households, both urban and rural, of Karimganj District of southern Assam. The empowerment level is estimated with the help of a composite index composed of mother's empowerment in four important areas of decision making. The results of the study indicate very low level of overall and component-wise empowerment of Muslim mothers except in the area of decision making regarding different aspects of their children's education. Most importantly, the authors found a statistically significant and positive impact of mothers' empowerment in the area of their children's education with their actual schooling attainments. This has far reaching and positive consequences so far as intergenerational transmission of education is concerned.*

**Key Words:** *Mother's Empowerment, Children's Educational Attainments.*

**JEL Classification:** I 20

### INTRODUCTION

Empowerment represents a wide range of concepts. It can be described as a process of enhancing the choice-making capacity of individuals or groups, total freedom to choose from among available options and thereafter, transforming the chosen options into desired actions and outcomes. It is a process by which individuals; groups and communities become able to take control of their circumstances and achieve their goals, which, in turn, enable them to work towards maximizing the quality of their lives. Empowerment commonly means 'becoming powerful'; to achieve and, therefore, self-help is viewed as one of the forms of empowerment. Empowerment has become the key solution to many social problems like high population growth rates, environment degradation and low status of women. "Power" is the key word of the term 'empowerment' which means 'control over material assets, intellectual resources and ideology over which control can be established.

Women empowerment means self-decision making power of women regarding education, participation, mobility, economic independency, public speaking, awareness and exercise of rights, political participation and many more factors. The empowerment of women occurs in reality when women achieve increased control and participation in decision making that leads to their better access to resources, and therefore, results in improved socio-economic status. Women Empowerment involves a central component of enhancement of women's ability to function collectively in their own interest (Agarwal B., 2001). Women's security, decision-making power, and mobility are three indicators of women's empowerment. In India, and more so for rural and less educated women, these three indicators are significantly low. The Global Gender Gap Report by the World Economic Forum in 2009 ranked India 114<sup>th</sup> out of 134 countries for inequality between men and women in the economy, politics, health, and education. On equal economic opportunities and women's participation in the labour force, India ranked 127<sup>th</sup> and 122<sup>nd</sup> respectively. There exist very large number of works on women empowerment and its varied dimensions. Some relevant works of recent time are reviewed below for deeper understanding of the problem.

Waseem, etal (2012), tried to analyse the Muslim women education and empowerment in rural areas of Aligarh district. They found that family structure had an association with the participation of women in the decision making process as well as on the status of women. Kundu and Chakraborty (2012), presented an empirical analysis of Muslim women empowerment within purposively selected areas of the Murshidabad district of West Bengal which has the highest concentration of Muslim people (63.67%) all over the country. The authors constructed a Cumulative Empowerment Index (CEI) for showing the multidimensional aspects of women empowerment. The authors found that the impact of accessing any type of media, family structure, family headship, household income, paid work and duration of marital life on Cumulative Empowerment Index of Muslim women was statistically significant at the study area. Chaudhry and Nosheen (2009), in their study conducted in Pakistan tried to show the determinants of women empowerment in Southern Punjab of Pakistan. Considering its multidimensional nature and aspects, a cumulative index for women empowerment is

constructed using four indices i.e. personal autonomy, family decision making, domestic economic decisions and political autonomy. The results showed that women empowerment is considerably influenced by education, access to media, socio-cultural norms of the community, job of women and household participation rate. **Mukherjee and Saraswati (2002)**, tried to identify the association between indirect and direct indicators of women's empowerment and its evidences in four metropolitan cities: Delhi, Mumbai, Calcutta and Chennai. The relationship of the different measures of empowerment and the socio-cultural settings to gender and educational preferences for children were also examined in the study. Direct indicators of women's empowerment included decision making, mobility and access to economic resources. These were viewed both as a process and an outcome. Education and work participation of women, the so-called indirect indicators of women empowerment, showed stronger association with the direct indicators of autonomy. Besides indirect measures of autonomy, direct indicators showed a significant effect on the gender preferences. It had also significant impact on the existence of a favourable attitude towards girl's education. However, there were socio-cultural variation in the level of empowerment and also gender preferences in four metropolitan cities. **Kalmijn (1994)**, tried to examine the influence of mother's occupational status on children's educational attainment by using a large national cross-sectional data set. He found that maternal occupational status has a strong effect on schooling, this effect is independent of father's education and occupation, it persists through the schooling career, and it is as important for sons as for daughters.

## 2. OBJECTIVES

The present study tries to examine the empowerment level of Muslim women and its impact on their children's educational attainments level. The specific objectives of the study are as under.

- (i) To find out the Empowerment Level of Muslim Mothers and
- (ii) To identify the impact of Empowerment of mothers in different dimensions on their Children's Educational attainments.

## 3. SAMPLE AND STUDY DESIGN

The study is based on primary data which is generated through household survey conducted in Karimganj District of Assam. All households, selected for the study, are Muslim households and the sample comprises of 84 such households. Out of these, 24 households are from urban areas and the rest 60 are from rural areas of Karimganj District. The variables taken for statistical and econometric analysis in the study are listed below.

- (i) **Children's Average Education (CAEd)** which is estimated by taking the average of education in years of all the children in a household (excluding 0-6 age group).
- (ii) Mother's Empowerment is determined in four different areas. The areas and the variables representing empowerment are as follows.

(a) **Mother's Decision Making Power within family (MDMP<sub>fm</sub>)**: It is measured with the following variables: Decision making regarding Family Health Care (FHC), Decision making regarding Larger Household Purchases such as TV, Refrigerator, two wheeler and four wheeler (motor) etc (LHP), Decision making regarding Routine Household Purchases (RHP), Decision making regarding Family Size, such as living with in-laws, other relatives, number of children (FS), Decision making regarding women's (including mother) Joining Workforce (JW). Decision making regarding mother's Going Outside Home for numerous genuine reasons (GOH), Decision making regarding Family's day to day Expenditure (FDTDE), Decision making regarding Spending Personal Income of Mother, real or hypothetical (SPI).

If mother is found to be able to take decision alone and independently, the value assigned is 2, if both the mother and her husband take the decision jointly then the value assigned is 1. But if mother has no role to play in decision making i.e., her husband or other family member(s) takes the decision, the value assigned is 0. Therefore, the aggregate maximum score of a mother may be 16 implying her supreme role in decision making regarding family matters. The aggregate minimum score, on the other extreme, is 0 implying no role of mother in decision making regarding family matters. Applying Dimension Index, the mother's decision making power regarding family matters (MDMP<sub>fm</sub>) in each household is estimated by the following formula:

$$MDMP_{fm} = \frac{(\text{Actual value} - \text{Minimum value})}{\text{Maximum value} - \text{Minimum value}}$$



(b) **Mother's Freedom of Movement (Mobility of Mother) (MFOM):** It is measured with the following variables: Mother's mobility to Local Market for Purchases (LMFP), Local Health Center/Local Doctor Clinic (LHC/LDC), Neighborhood for Gossiping (NFG), Home of Relatives/Home of Friends (HoR/HoF), Other City or Other Villages (OC/OV), Cinema/Festival/Village Fair (C/F/VF), Visiting Parental Home (VPH), Participate in Cultural Programmes of Village/Town (PCPOV/T), Participate in Religious Programmes of Village/Town (PRPOV/T), Participate in the Meetings of Women Organizations (PIMWO).

If mother is found to be able to move to the above places/participate in the above mentioned activities frequently, the value assigned is 2. If mother moves to the above places/participate in activities sometime then the value assigned is 1. But if mother never moves/participates to the above places/activities, the value assigned is 0. Therefore, the aggregate maximum score of mother may be 20 implying her absolute freedom of movement and participation. The aggregate minimum score, on the other extreme, is 0 implying no freedom of movement/participation. The mother's freedom of movement (MFOM) index is estimated by applying Dimension Index, as defined above.

(c) **Mother's Decision Regarding Control Over Economic Resources (MDRCOER):** In this area mother's empowerment is measured by the variables Routine Household Spending (RHS), Purchasing Jewelry/Bonds/Shares (PJ/B/S), Purchasing Gifts for Relatives (PGFR), Control on Expenditure for Purchasing Daily Necessities (COEFPDN), Purchasing Clothes and Makeup Articles (PCMA), Control the Wastage of Commodities for Use (CWOCFU), Sale or Exchange of Land (S/EOL), Educational and other Expenses on Children (E/EOC), Purchasing Daily Food (PDF), Purchase of Land (POL).

If mother is found to be able to take decision alone and independently, the value assigned is 2, if both the mother and her husband take the decision jointly then the value assigned is 1. But if mother has no role to play in decision making i.e., her husband or other family member(s) takes the decision, the value assigned is 0. Therefore, the aggregate maximum score of mother may be 20 implying her exclusive role in control over economic resources. The aggregate minimum score, on the other extreme, is 0 implying no role of mother in controlling economic resources. Applying Dimension Index, the mother's decision making power in controlling economic resources (MDRCOER) index in each household is estimated.

(d) **Mother's Decision Regarding Children's Education (MDRCE):** In this area mother's empowerment is measured by the variables Selection of Schools/Colleges for Children (SOS/CFC), Selection of Course of Study of Children (SOCOSOC), Accompany Children for Schools/Colleges related matter (ACFS/CRM), Decision Making Regarding Higher Education Of Children (DMRHEOC), Decision Making Regarding Marriage of Children (DMRMOC), Decision Making Regarding Choice Between Marriage and Higher education of Children (DMRCBMHEOC).

If mother is found to be able to take decision alone, the value assigned is 3, if she takes the decision to an average extent then the value assigned is 2, if she takes decision to some extent then the value assigned is 1. But if mother has no role to play in decision making i.e., her husband or other family member(s) takes the decision, the value assigned is 0. Therefore, the aggregate maximum score of mother may be 18 implying her supreme role in Decision Making Regarding Children's Education. The aggregate minimum score, on the other extreme, is 0 implying no role of mother in Decision Making Regarding Children's Education. Applying Dimension Index, the Mother's Decision Regarding Children's Education (MDRCE) index in each household is estimated.

The overall Mother's Empowerment Index (MEI) is measured by assigning equal weight to each of the above four areas of participation/ decision making. Therefore,

$$MEI = 1/4[(MDMP_{fm}) + (MFOM) + (MDRCOER) + (MDRCE)]$$

#### 4. RESULTS AND DISCUSSION

The empowerment level of a mother of a Muslim household is shown with the help of Mother's Empowerment Index (MEI), the value of which ranges between 0 and 1, the former implying no empowerment at all and the later total empowerment. Higher the value in between 0 and 1, higher the level of empowerment. MEI is the simple arithmetic average of four components, MDMP<sub>fm</sub>, MFOM, MDRCOER and MDRCE; each one which represent mother's empowerment level in respective areas. Since these are also estimated by applying dimension index, their values range between 0 and 1, higher value indicating higher empowerment of women in respective areas. The average empowerment level of women in each of these areas are shown in Table- 1. It is

found to be highest ( 0.6776) in the area of MDRCE i.e., mother's decision making ability regarding children's education. It is lowest (0.3936) in the area of MDMP<sub>fm</sub> (Mother's decision making power within family). High Standard Deviation value is observed in case of MDRCOER and the highest Standard Deviation value is observed in case of MDRCE implying household to household wide fluctuation in the empowerment level of women. The value of the overall average empowerment level of women (MEI) is found to be only 0.4909 with very low SD value of 0.1637, indicating unsatisfactory level of women awakening in the study area.

**Table- 1 :Components-wise Mother's Average Empowerment**

Component	Average Empowerment	Std. Deviation	N
CAEd	10.6167	2.37276	84
MDMP	0.3936	.20507	84
MFOM	0.4125	.12985	84
MDRCOER	0.4798	.16667	84
MDRCE	0.6776	.23739	84
MEI	0.4909	0.1637	84

Table-1 also shows the average level of children's educational attainments (CAEd) in the sample Muslim households. It is found to be low at 10.61 years with SD value 2.37.

To identify the impact of mother's empowerment level component-wise, the following linear regression model is constituted considering CAEd as dependent variable.

$CAEd = \alpha + \beta_1 MDMP_{fm} + \beta_2 MFOM + \beta_3 MDRCOER + \beta_4 MDRCE + u_i$ , where  $\alpha$  is the constant term,  $\beta_i$ 's the regression coefficients and  $u_i$  is the error term. The estimated regression result is presented in Table- 2. In the result, the only variable that has turned up statistically significant at 1% level is MDRCE. It has positive impact on children's educational attainments. The other independent variables are not statistically significant although they have expected positive causation with dependent variable CAEd except variable MDMP<sub>fm</sub> which shows negative relation with the dependent variable.

**Table -2 :Regression Result**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.199	.785		7.901	.000
	MDMP	-1.472	1.877	-.127	-.784	.435
	MFOM	.182	2.305	.010	.079	.937
	MDRCOER	.241	2.348	.017	.103	.919
	MDRCE	7.093	1.412	.710	5.023	.000

*Dependent Variable: CAEd,  $R^2 = 0.417$ , Adjusted  $R^2 = 0.387$ , F value = 14.13 ( Significant at 1% level)*

All the independent variables together explain 39% variation in CAEd. The F-value is found statistically significant.

## 5. CONCLUSION

Education has tremendous importance for attaining all round progress in every spheres of life. Therefore, there has been a plethora of research on identifying education promoting factors from socioeconomic domain of life. Education is also considered as a means for attaining women empowerment. However, there are very few works that shed light on the impact of mothers' empowerment on their children's education although this has strong bearing on intergenerational transmission of education. The present study finds that mothers' ability to take decision regarding different aspects of their children's education helps children to attain higher level of education in Muslim society. However, the average overall empowerment level of Muslim mothers is found to be very low which is undoubtedly a matter of serious concern for all. Definite policy measures need to be initiated to improve the empowerment level of Muslim mothers which will have favourable impact on children's educational attainments in Muslim households.

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**REFERENCE**

1. Agarwal Bina (2001), "Empowerment of women throughout the life cycle as a transformative strategy for poverty eradication" *United Nations Division for the Advancement of Women (DAW)* <http://www.un.org/womenwatch/daw/csw/empower/documents/Agarwal-EP2.pdf>.
2. Chaudhry Sharif Imran and Nosheen Farhana (2009), "The Determinants of Women Empowerment in Southern Punjab (Pakistan)", *European Journal of Social Sciences*, Volume 10. No. 2.
3. Dey Dalia and Pain Kumar Asis (2007), "*Women Empowerment New Dimensions And Empowerment*" *Icfai University Publication*.
4. Kalmijn Matthijs (1994), "Mother's Occupational Status and Children's Schooling", *American Sociological Review*, Vol. 59, No. 2.
5. Kundu Kumar Suman and Chakraborty Ananya, (2012), "An Empirical Analysis of Women Empowerment within Muslim Community in Murshidabad District of West Bengal, India", *Research on Humanities and Social Sciences* Vol.2, No.6, <http://www.iiste.org>.
6. Mukherjee Protap and Saraswati Ray Lopamudra (2002), "Women's Empowerment and Gender Preferences for Children: A Study of Four Metropolitan Cities in India", *International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai press*.
7. Raju Lakshminpathi M.Venkateswarlu V. and Padmaja G. (2007) "*Women Empowerment Challenges and Strategies*" *REGAL Publication New Delhi*.
8. Waseem Syed, Ashraf A. and Ayaz Ahmad (2012), "Muslim Women Education and Empowerment in Rural Aligarh (A Case Study)", *International Journal of Scientific and Research Publications*, Volume 2, Issue 4.

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## **PRIORITIES TO BUILD EFFICIENT COMMODITY MARKET IN INDIA**

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### **ABSTRACT**

*Commodity trading in India has a long history. Commodity markets in India have shown tremendous growth in very short span of time. India is among top 5 producers of most of the Commodities, in addition to being a major consumer of bullion and energy products.*

*Agriculture contributes about 22% GDP of Indian economy. It employs around 57% of the labour force on total of 163 million hectares of land. Agriculture sector is an important factor in achieving a GDP growth of 8-10%. All this indicates that India can be promoted as a major centre for trading of commodity derivatives.*

*A sizeable retail investors trading on equity have shifted their base and are now focusing on commodities market. Many have started observing the daily commodity market scenario and are keeping close watch on the fluctuations in prices of commodities. Gold and crude are hot favourites amongst people who are engaged in equity trading as they are well versed with the situation of these commodities in the international market.*

*In this context an attempt is made in this paper to have a bird's eye view on commodity trading, structure of commodity exchanges and suggest some initiatives to make Indian Commodity Market more efficient.*

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### **PRIORITIES TO BUILD EFFICIENT COMMODITY MARKET IN INDIA**

Commodity trading in India has a long history. In fact, commodity trading in India started much before it started in many other countries. However, years of foreign rule, droughts and periods of scarcity and Government policies caused the commodity trading in India to diminish. Commodity trading was, however, restarted in India recently. On basis of the sheer volumes traded every day, the commodities market is the world's second largest market after the currency market.

The Forward Contracts (Regulation) Act was enacted in 1952 to regulate the trading in forward and futures. The Forward Markets Commission (FMC) was instituted as a regulatory body in the following year. The task of the commission was to monitor and regulate the trading of forward contracts since manipulation in these markets are likely to create severe imbalances with adverse welfare effects. But in 1966, futures trade was altogether banned to give effective powers to government price control. The real breakthrough came with the liberalization of the Indian economy in the early 1990s and with the National Agricultural Policy the commodity futures market made the true restart in early 2000s with establishment of a number of nationwide multi commodity exchanges.

### **COMMODITY TRADING**

Commodities are essential goods that have a common price per unit across geographies (for instance, gold). Raw products that are used to produce other goods and services are considered commodities. Some of the most common commodities traded around the globe include Metals like gold, silver, copper, etc. Energy products like oil, gas, etc. Agricultural outputs like corn, sugar, coffee, cotton, etc. The prices of these commodities are determined mainly by the supply and demand of these goods in the global market.

Commodity trading is the act of buying and selling commodities on major exchanges through standardized contracts. When physical substances like metals, food grains, etc. are traded in the global market to profit from the expected changes in price, it is called commodity trading.

### **WHY INVEST IN COMMODITIES?**

While earning profit is one of the chief reasons why people trade in commodities, several other advantages of this investment also propel investors towards it. One such advantage is liquidity. Due to the participation of several traders and speculators, the commodity market is among the most liquid in the world.

Apart from liquidity, commodity trading also provides leverage, which allows traders to operate on margin. This means that people can make large-value transactions by paying a small part of the total transaction value. Moreover, commodities allow traders to profit from the falling market as well. They can invest their money on the upside as well as the downside movement of commodity prices. Constant fluctuation in this market is certainly a risk, but it also opens up the opportunity to earn higher profits.

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**STRUCTURE OF COMMODITY EXCHANGES IN INDIA**

The main objective of Commodity Exchange is to provide a platform for risk hedging and fair price discovery. At present, there is a two-tier structure for Commodity Exchanges in India: Regional and Country-Wide. Regional exchanges are permitted to have only a limited number of contracts whose membership is local. Countrywide national exchanges are multi-commodity electronic exchanges with a demutualized ownership pattern. Currently, there are three such exchanges, viz., MCX (Multi Commodity Exchange), NMCE (National Multi Commodity Exchange) and NCDEX (National Commodities and Derivatives Exchange). The regulatory body is Forward Markets Commission (FMC) which was set up in 1953.

**MULTI COMMODITY EXCHANGE (MCX):**

MCX has evolved as the largest exchange in the country. MCX started its operations on November 10, 2003 and today it holds a market share of over 80 per cent of the Indian commodity futures market and has more than 2000 registered members operating through over 100,000 trader work stations across India. MCX offers more than 40 commodities across various segments such as bullion, ferrous and non-ferrous metals, and a number of agri-commodities on its platform.

On March 09, 2012, MCX became India's 1 exchange to be listed. MCX is the world's No. 1 exchange in silver and gold, No. 2 in natural gas and copper and No. 3 in crude oil with respect to the number of futures contracts traded. Market share of MCX in the FY 2012-13 is 87.3 percent.

**National Commodity & Derivatives Exchange (NCDEX):** NCDEX is the second largest commodity exchange in the country after MCX. NCDEX is a public limited company incorporated on 23 April 2003 under the Companies Act, 1956. NCDEX is regulated by Forward Market Commission (FMC) in respect of futures trading in commodities. It is located in Mumbai and offers facilities in more than 550 centres in India. NCDEX currently facilitates trading of 57 commodities – Agri products include cereals, pulses, oil and oil seeds, spices, guar, plantation products etc. and Non-agri products include precious metals, metals, energy etc.

**National Multi Commodity Exchange (NMCE):** NMCE is third national level futures exchange that has been largely trading in Agricultural Commodities. National Multi Commodity Exchange is the first De-Mutualised Electronic Multi-Commodity Exchange of India located at Ahmedabad was granted the National status on a permanent basis by the Government of India and operational since 26th November 2002. NMCE commenced futures trading in 24 commodities on a national scale and the basket of commodities has grown substantially since then to include cash crops, food grains, plantations, spices, oil seeds, metals & bullion among others.

**COMMODITY FUTURES**

Commodity futures are contracts or agreements between two parties, agreeing to buy or sell certain units of a commodity on a future date at a fixed price. On this future date, the buyer has to pay the price that was agreed when the contract was made, and the seller has to transfer the ownership of the said commodities to the buyer.

If you believe that the price of a certain commodity, say coffee, will rise in the next couple of weeks, you can buy a futures contract which promises to sell coffee at today's price. When this commodity is transferred in your name, you can sell it at a profit. However, if the price falls, you will have to sell your contract at a loss.

At present, futures contracts are available for over 100 commodities across the country. The total number of commodities traded on Futures Exchanges are categorized into four major groups, viz., Energy, Metals, Bullion and Agricultural Commodities.

**ENERGY COMMODITIES**

Oil: Crude, Light Products, Heavy Products, Natural Gas Liquids (NGLs), Distillates, Fuel Oil, and Natural Gas; Electricity; Coal; Emissions; Liquefied Natural Gas (LNG); Weather; Biofuels (Biodiesel & Ethanol).

**METAL COMMODITIES**

Base Metals: Aluminium, Copper, Zinc, Nickel, Lead, Tin, Aluminium Alloy, Cobalt, Molybdenum

Precious Metals: Gold, Silver, Platinum Group Metals

Ferrous Metals: Hot and Cold Rolled Coil, Billet, Iron Ore

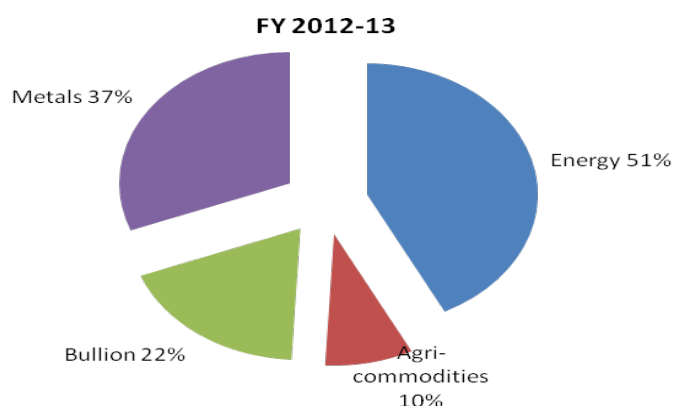
**AGRICULTURAL COMMODITIES**

Cereals, Oil and oilseeds, Pulses, Fibres, Plantations, Spices, Biofuel, Cocoa, Coffee, Corn, Palm Oil, Soybeans, Sugar, Wheat, Guar seed, Mentha oil, Potato, and others.

There has been a change in the composition of trade. Initially, agricultural commodities dominated the market, bullions occupying the second place. In 2004-05, for instance, 69% of the total volume of trade was in agricultural commodities and the rest was in bullions and metals.

However, the importance of agricultural commodities has decreased sharply in recent years while that of bullions has increased. In 2010-11, bullions occupied the first position with 45% share followed by metals with 24% and energy with 19%. The share of agricultural commodities in futures trading has come down to the level of 12%. But the Commex's turnover dipped 6 percent in FY 2012-13 compared to last 5 years due to sluggish participation in gold and silver futures. (Figure 2).

**Figure-1: Share of Commodity Groups in Trade Volume**



## TRADING COMMODITY FUTURES

Commodity transactions take place on a regulated commodity exchange. Any individual or institution or a broker can take part in such trading, who is a member of an exchange and has the authority to carry out transactions on their behalf.

Commodity futures, like currency derivatives, allow you to operate on a margin. This means that you need to invest only a small percentage of the total transaction value while trading. This allows you to earn more profit with a lesser amount (while exposing you to a higher risk).

For instance, many brokers might allow you to buy a futures contract of 1,000 barrels of oil worth \$50,000 for with an initial amount of \$5,000. With such exposure, even a small rise in the price could result in huge profits, and vice versa.

While entering into a commodity futures contract, it is important to note that the buyer should sell his holdings before the expiry of the contract. Not closing an existing position might result in possession of a large quantity of unwanted commodities.

## FUTURE OF THE FUTURES MARKET AND REGULATORY ISSUES

Derivative market serves two basic purposes in an economy. It provides hedging opportunities to those who suffer from uncertainties in market prices. It applies particularly to agricultural and primary articles for which supply depends highly on natural conditions such as weather.

The producer, in this market, can fix his product price beforehand by agreeing on a forward contract. Buyers can also do the same to confirm the purchase price. In fact, commodity futures evolved as a means of hedging, although latter on it was used more for speculation purposes. In India, for instance, over 95 per cent of the trading volume in futures today comprises speculative trades.

Critics raise the point that speculators dominate the futures market and determine the futures price, that is, the price at which the commodity can be traded in future. The futures price, in turn, influences the current market price, that is, the spot price of the commodity. Commodity prices may therefore be guided by futures prices.

Academicians and business experts argue that speculation is not specific to futures market. Speculation is common even in the spot market. The demand-supply forces in the spot market are guided by the expectations

of the market participants about the future. Thus, even if we prohibit futures market and let spot market to operate efficiently, the current price will always reflect, among other things, the participants' view about future demand and supply.

Commodity market performs another economic function, viz., Price Discovery. Price discovery has been defined as revealing information about future cash market prices through the futures market. Producers and consumers take their decisions partly on the basis of current market prices (spot prices) of the products and partly on the prices to prevail in future.

### **RECENT TRENDS IN COMMODITY MARKETS**

Commodity markets in India have shown tremendous growth in very short span of time. India is among top 5 producers of most of the Commodities, in addition to being a major consumer of bullion and energy products.

Agriculture contributes about 22% GDP of Indian economy. It employs around 57% of the labour force on total of 163 million hectares of land. Agriculture sector is an important factor in achieving a GDP growth of 8-10%. All this indicates that India can be promoted as a major centre for trading of commodity derivatives.

The declining price for crude oil also had their effect on the global supply of plastics and polymers. Naptha and ethylene prices gave in slightly while propylene prices dropped by 24 percent, after overcoming production bottlenecks in June. Ethylene gave in by three percent.

Another interesting factor is that retail traders are shifting from capital market to commodity market. As per an estimate, 10% of retail investors engaged in equity trading have now shifted to commodity trading, and a section of 20-25 % are amongst those who are not active in commodity market but keep track of the rates and the daily markets. Sources claim that this chunk of 'fence sitters' would soon become active players in online commodity trading.

### **INITIATIVES TO MAKE INDIAN COMMODITY MARKET MORE EFFICIENT**

It is of no doubt that the Commodity Exchanges and the regulator, Forward Markets Commission (FMC) are taking tireless efforts to make the commodity market more transparent and efficient; but to take the Commodity Market to the next level the following initiatives may be instituted.

- In order to initiate active participation by farmers in the commodity future markets, integration of both spot market and commodity futures market should be done.
- There is a large scope of launching new agricultural commodities future contracts in order to initiate active participation by farmers. The government at the state and national level should incentivise the usage of hedging measures by both farmers and others in the value chain by keeping transaction costs low for risk hedgers in the commodity market.
- The stakeholders, farmers, traders and investors should be encouraged to participate more proactively by deepening and widening their participation in commodity markets.
- Lack of familiarity discourages retail investors from actively participating in commodities trading. So, appropriate steps must be taken to create awareness among retail investors.
- Banks and mutual funds should be permitted to participate in the commodity futures market.
- Large corporates, trading houses and high net worth individuals (HNIs) who have limited trading on commodities market should be motivated in order to increase the percentage of GDP to the nation.
- The Forward Contracts (Regulation) Act [FCRA] amendment bill should be passed at the earliest which will bring a stronger regulatory environment as well as innovations such as options and indices.
- Focus should be given on commodities that are crucial to the Indian economy as well on increasing the participation of hedgers, mainly those with genuine exposure to the underlying commodity such as producers, processors, industrial consumers, exporters, importers and traders.

- The exchanges should take various initiatives to systematically develop markets through continuous innovation, education and research focused on spreading awareness about the modern trading mechanisms facilitated by commodity exchanges.
- To widen and deepen the commodities market, policymakers need to strengthen the institutional infrastructure through market-friendly policies on taxation.

## CONCLUSION

Today, India's commodity market is five times higher than the capital market. The commodity market has a long way to go in terms of depth and liquidity, participation by foreign institutional investors, banks and financial institutions; product innovation, etc.

With the increase in rate of inflation, there is growing awareness among people regarding prices of commodities. This has resulted in growing interest of traders and investors towards understanding the dynamics of commodity market, however, this trend has just set in and is in a nascent stage.

Further, there are indications that a section of equity trading investors have gone towards commodity market and have shifted their interest. Some of them have started trading whereas others have started taking interest in commodity market activities.

Once the Forwards Contracts Regulation Amendment Bill is passed, it will certainly be a boost to the commodity exchange industry through introduction of new products like options and new-generation commodity derivatives to expand risk management opportunities beyond the usual futures and forward instruments, and will provide more autonomy and accountability in the operations of the FMC (the regulator of forwards markets).

## REFERENCES

- Aggarwal, D.K. (2014): "Vote on account 2014: Way forward to make Commodities Market Buzz", The Economic Times, Feb.15, 2014.
- Bhargav Trivedi, (2008): "Retail Investors Eye Commodity Markets", The Economic Times, Jul.18, 2008.
- Bhattacharya, H. (2007): "Commodity Derivatives in India", Economic & Political Weekly, Vol. 2, No. 3, pp. 1151-1162.
- Bose, S. (2008): "Commodity Futures Market in India: A Study of Trends in the Notional Multi-Commodity Indices", Money & Finance, Vol.3, No. 3, pp. 125-128.
- Bose, S. (2009): "The Role of Futures Market in Aggravating Commodity Price Inflation and the Future of Commodity Futures in India", Money & Finance, Vol.3, No. 4, pp. 95-122.
- Chakrabarti, R. (2006): The Financial Sector in India, Oxford University Press, New Delhi.
- Economic Survey, 2008-09, Ministry of Finance, New Delhi.
- Economic Survey, 2009-10, Ministry of Finance, New Delhi.
- Economic Survey, 2010-11, Ministry of Finance, New Delhi.
- Kabra, K. N. (2007): "Commodity Futures in India", Economic & Political Weekly, Vol. 42, No. 13, pp. 1163-1170.
- Kumar, R. (2010): "Mandi Traders and the Dabba: Online Commodity Futures Markets in India", Economic & Political Weekly, Vol. 45, No. 31, pp. 63-70.
- Nath, G. C and T. Lingareddy (2008): "Impact of Futures Trading on Commodity Prices", Economic & Political Weekly, Vol. 43, No. 3, pp. 18-23.



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## **DATA MINING APPROACH TO LOCATE FAULT IN TELECOMMUNICATION**

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### **ABSTRACT**

*The issue of fault location received extensive concern in the field of telecom network management. The data mining approaches are introduced to extract clues from the telecom alarm data for fault location. Aiming at the key problems in telecom data mining. We have made a comprehensive analysis on the telecom network and its data as well as the fault propagation some important characteristics are discovered, and a fault location oriented network model is built to improve the traditional approaches in data transforming and data mining. An enhanced data mining algorithm is proposed to introduce the constraints in real world into the data mining procedures. A data mining tool (PRIS Miner) is implemented to benchmark the new algorithm, and our experiments show that the new algorithm is quite effective in improving the accuracy and efficiency of the Prefix Span mining algorithm.*

*Keywords—PRIS Miner, Prefix Span, Topological based sequential mining algorithm, Telecom network alarm data preprocessing*

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### **I. INTRODUCTION**

#### **A. Backgrounds**

As the evolution of the modern communication systems, fault location has been focused on by many researchers. Many fault location solutions have been presented. The Expert Systems [1] and the graph theory based approaches [2] have been discussed and many of which have been adapt to industrial network management systems. The above approaches are applicable in their dissimilar fields and situations, whereas their drawbacks are also significant. To locate the root fault in the modern telecom with large network elements and different infrastructures, we need to introduce data mining approaches to fault location. The devices with faults generate many correlated alarms through a certain propagation path, and these correlated alarms can be extracted as frequent sequences by the data mining algorithms. In telecom networks (especially mobile communication networks), the reciprocity and interaction among network devices are the root cause of fault propagation. Thus, discovering sequential patterns from alarm sequences of correlative devices seem to be more accurate and efficient [3]. Therefore, special techniques focused on data preprocessing, optimizations and constraints for mining algorithms are in demand.

#### **B. key problems of data mining on telecom alarm data**

The data mining algorithms provide the data with only statistical constraints, neglecting the inherent relationship between the items [4]. Topologically connected devices or nodes are more likely to propagate fault than those are not.

As a result, taking the actual constraints into account is a key technique to improve the accuracy and efficiency of the mining algorithms. In order to apply the constraints to telecom alarm mining, a proper model describing the topological relation of the telecom network needs to be set up in advance. This introduces a new problem: the telecom network modeling. A proper model should act like an abstract view of the network, which hides the details irrelevant to our study and emphasizes the attributes we are focused on [5]. As discussed above, an accurate and efficient telecom alarm mining system should take measure so introduce actual constraints in order to remove redundancy in pattern or sequence generation, and to build a proper telecom model to exploit the topological information of the network. Our motivation and main idea is to overcome the two key problems by proposing new approaches of constraint mining and telecom network modeling.

#### **C. Paper Organization**

We introduced the backgrounds of data mining for telecom network fault location and the key problems of doing that. In Section 2, a new topological constraint based mining algorithm will be proposed, including the special preprocessing approaches and the topological modeling of the telecom network. Next, in Section 3, a telecom alarm mining tool adopting the above approaches, PRISMiner, will be introduced, as well as the implementation features. A series of experiments are also designed and performed to benchmark the new approach. The future work of the mining task and fault location will be discussed in the last section.

## II. TOPOLOGICAL BASED SEQUENTIAL MINING ALGORITHM on TELECOM ALARM DATA

The characteristics of the alarm data give us some obstacles of scanning the telecom network alarm data for clues of fault location. As a result, we proposed a particular approach for telecom network modeling and data preprocessing to overcome the difficulty of the imperfection and noise of data. To improve the accuracy and efficiency of the mining algorithm, an improved PreFix Span Algorithm equipped with the topological constraint based algorithm is proposed. The following section tries to give detailed descriptions of the network modeling, preprocessing approach, and the improved PreFixSpan algorithm.

### A. TOPOLOGICAL CONSTRAINTS ORIENTED TELECOM NETWORK MODELING

According to the analysis to the telecom network structure and its fault propagation, we conclude that the alarms are propagated through the network topology. To exploit the structural information and regularity of fault propagation in preprocessing and the mining algorithm, we need to set up a model to indicate the topological relationship of the network, using this model to indicate the fault propagation. Topologically connected network elements may generate alarms due to the same fault, which hence makeup of the propagation path. The alarm may propagate from lower layers to higher layers, and vice versa. However, no matter how the alarms propagate, the path is limited to a network element cluster, which is defined as the set of topologically connected network elements. Our aim is to design an algorithm to generate clusters from telecom network structures. We can divide the telecom network elements into several subnets according to their functions. In general, network elements can be divided into two main categories: common network elements and private connected network elements. The common network elements are connected to any other network elements logically or physically. On the other hand, the private connected network elements are only connected with elements of the same the subnet. The network elements in the voice subnet are specially treated as they have different connection type. These categories of clusters make up the topological constraints oriented telecom network model. The model can help us to determine whether some specific network elements are topologically connected via the following algorithm:

#### Topological Constraint Algorithm:

**Function:** Is Topo Connected

**Input:** Array, Precision, Common Cluster, Voice

Clusters, Special Clusters

**Output:** Whether the Array of elements are

Topologically connected

Temp

Add items of Array that are not in

Common Cluster to Temp

N Number of items of Temp that in

Special Cluster

If ( $N \geq \text{Temp.size} * \text{Precision}$ )

Return true

Else N 0

N Number of items of Temp that in

Voice Cluster

If ( $N \geq \text{Temp.size} * \text{Precision}$ )

Return true

Else

Return false

The algorithm ignores the common cluster elements in the input elements, as they are definitely connected with other elements. The return value indicates whether the input elements are partially or completely connected within the same cluster. This algorithm can be easily used to generate transaction sand sequences in data transforming as well as data mining.

## **B. TELECOM NETWORK ALARM DATA PREPROCESSING**

The raw telecom alarm data need to be transformed into well-formed data which are ready for mining. However, the input format of typical pattern and sequence mining algorithms are not relational. Pattern mining algorithms require transaction data while sequence mining algorithms require sequence data. The traditional method of transforming relational data into transactions and sequences is the fixed sliding window method. Giving a specific time window length, the alarms occur within the same time window is put into a transaction and the order of occurrence of these alarms is ignored. The fixed sliding window is simple to implement, but might not be suitable for the telecom alarms. Although the overlapped window can avoid adjacent alarms from being separated, yet not all the correlated alarms are temporally adjacent. Thus, we proposed a topology based overlapped sliding window method to transform relational data into transactions, and further into sequences. The start point of the window is sliding down along the time line with a small step of time span, in order to include any possible starts of the propagation sequence. The end point of each window is no longer determined by a fixed length of time window, but by the topological relationship between adjacent alarms. The newly covered alarms are included in the transaction if and only if they are topological connected with the former ones that are already included in the transactions. If the newly covered alarm are topological relevant, the window continue to grow until it reaches a specific threshold, otherwise the current window ends and a new window begins. Thus, the transactions only contain topological connected alarms, which are far more refined than the ones generated by the fixed window method. Same method can be adapted to transactions to generate sequences.

## **C. TOPOLOGICAL CONSTRAINTS DATA MINING on TELECOM ALARM DATA**

We exploit the data mining algorithms on telecom alarm data to extract the frequent alarm sequences to help the fault location. After the preprocessing procedure discussed above, the telecom data are ready for mining. However, the mining procedure might be very time consuming if the mining algorithm itself is inefficient. Therefore, we have to make a choice among the various mining algorithms to choose the best one to fulfill the mining task. The telecom alarm data is a sparse but large dataset. The frequent patterns are mainly short patterns, while long patterns only exist with low support. The telecom alarm data always have huge size. In China, a provincial telecom operator generates about 900,000 alarm records per week, with the size of 40MB, and about 5 million alarm records per year, with the size of 2GB. As for the sparse datasets, the Apriori-like algorithms [7] as well as the pattern growth based algorithms [8] are both suitable. But facing up to such huge sized database, trying to use the Apriori-like algorithms is obviously not a wise decision, as frequent database scanning can be nightmare due to the huge size of the database. The pattern growth based algorithms do not need to scan the entire database in every step of iteration. Instead, the information of frequent patterns is stored in a particular data structure whose size is always limited. The pattern growth based algorithms are much more efficient than the Apriori-like algorithms, especially in occasions with low support. All in all, we choose the PreFixSpan [9] Algorithm. The main idea of PreFixSpan algorithm is to search the frequent patterns in the projection database rather than the original database. The PreFixSpan algorithm employed the pattern growth methodology and the divide-and-conquer strategy, and it's hence very efficient. However, the PreFixSpan algorithm only obtains the statistically frequent patterns, which are not definitely indicating meaningful rules. Some items only happen to occur together for many times. The traditional mining algorithms, including PreFixSpan, cannot distinguish the really associated items from those occasionally frequent co-occurring items. Thus, as discussed above, the constraints from real world models have to be introduced to solve the problem. We exploit the Topological Constraint Algorithm in the PreFixSpan algorithm in the following routine:

**Procedure:** Topological Constraint Based PreFixSpan:

**Input:** Prefix, Projection DB, Min.Support

**Output:** Frequent Patterns

N All Frequent items in Projection DB

For each item  $x$  in N

P Append  $x$  to Prefix

**If support (p)  $\geq$  Min.Support and IsTopoConnected(p)**

Output p

Call Topological Constraint Based PreFixSpan with p, Projection DB w.r.t. p, Min.Support .

The underlined statement is the core step of our approach. Differing from the original PreFixSpan, and frequent pattern has to be both frequent (more frequent than the Minimal Support) and topologically connected, then it can be used to generate longer patterns recursively. With this added constraint, patterns from the occasionally

co-occurring items are pruned in the recursive tree, thus huge computation time consumed on these meaningless patterns are saved, and the accuracy is improved as well. In next section, experiments will be performed to benchmark the new approach.

### III. EXPERIMENTS and CONCLUSIONS

#### A. INTRODUCTION to the EXPERIMENT PLATFORM

To implement and benchmark the algorithms and approach we proposed, a data mining tool is designed and developed as the experiment platform. The tool named PRISMiner is designed to perform and benchmark data mining algorithms for fault location tasks. The tool consists of three components: data preprocessing, data mining and algorithm benchmarking.

The data preprocessing component refines the raw alarm data to remove the redundancy and noise and transform the data into the format ready for mining. The data mining components is an implementation of 6 data mining algorithms, including 4 non-sequential ones : Apriori[7], FP-Growth[8], Eclat[10], Relim[11], and 2 sequential ones: GSP[12] and PreFixSpan[9]. Each algorithm can be equipped with the Topological Constraint Algorithm if the user prefers to. The algorithms are implemented in C++, and the STL containers are employed to build the basic data structures of the algorithms. The outputs as well as the performance statistics of the algorithms are stored in specific files for benchmarking. The following experiment is performed with the PRISMiner to benchmark the approaches we proposed with the baseline approaches.

#### B. EXPERIMENT DESIGN and RESULT ANALYSIS EXPERIMENT 1 FIXED SLIDING WINDOW VS. TOPOLOGY BASED in DATA TRANSFORMING

As we claimed, the sliding window method is easy to implement, but too much of the generated transactions or sequences are meaningless as they are occasionally co-occurred. The topology based method that we proposed only combines the alarms that occurred in the same fault propagation path, and is thus more reasonable. We made a comparison between the two different ways of data transforming on the same raw data table.

TABLE I FIXED SLIDING WINDOW VS. TOPOLOGY

Sup.	Way of transform	Time for Execution	#Original Records	#Seqs	#Patterns
0.5	F.S.W	4m1s609ms	69715	1349	24
0.3	F.S.W	17m17s94ms	69715	1349	188
0.1	TopoBased	123ms	69713	796	13
0.05	TopoBased	172ms	69713	796	36
0.03	TopoBased	250ms	69713	796	102
0.01	TopoBased	704ms	69713	796	636

Table 1 shows that the topology based are more. This was efficient than the sliding window method. The number of generated sequence by topology based method is much less than that of the fixed window. But more refined frequent patterns are mined out in turn. The algorithm's execution time of topology based method is much less than the fixed window methods, as the meaningless sequences are suppressed.

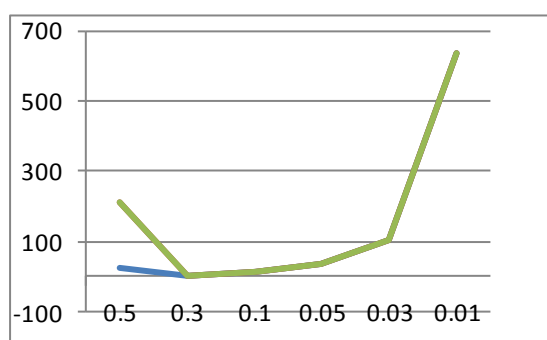


Figure 1 Results of PreFixSpan Using the Fixed Sliding Window Method vs. Topology Based Method for Data Transform

Figure 1 shows that, as for low support mining, the data generated by topology based method contribute much more patterns than the fixed window, while the latter can hardly get any result in tolerable time. So it is more appropriate to use the constraint based method for sparse datasets like telecom alarm records.

#### Experiment 2 Constraint based PreFixSpan with original PreFixSpan

We made a comparison between the topological constraint based PreFixSpan with the original version on the same data set. The result is shown in Table 2.

TABLE II CONSTRAINT BASED PREFIXSPAN VS. ORIGINAL PREFIXSPAN

Sup.	Is Top of Constraint	Time for Execution	#Patterns
0.5	No	3m34s390ms	24
	Yes	4m1s609ms	19
0.3	No	71m34s140ms	195
	Yes	17m17s94ms	188

From the table, we see that the time of PreFixSpan consume is largely reduced by the Topo Constraint Algorithm with support 0.3. But with support 0.5, the time increases. This is because the time cost of determining whether patterns are topologically connected is larger than the process time of the pruned patterns. In low support occasions, which are more usual, the time cost by the pruned patterns is much more than the cost to determine whether to prune them. As a result, the Constraint Based Algorithm is thus useful for most of occasions. Besides, the frequent patterns that the algorithms output have been refined. We made another comparison between the above algorithms with the GSP algorithm, which is an apriori-like sequential mining algorithm. The result is shown in Figure 2, which shows that the number of patterns is slightly reduced and refined both in PreFixSpan and GSP.

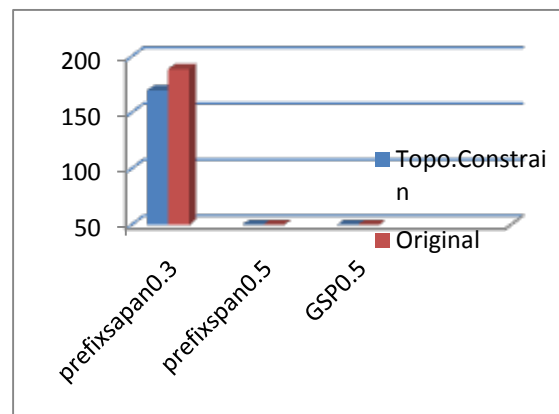


Figure 2 the effect of Topological Constraint Algorithm to Sequential Algorithms

#### IV. CONCLUSIONS

The above experiments show that the Topological Constraint Based Algorithm is quite useful in both data transforming and data mining. When adopted in data transforming, the method can reduce the number of generated sequences significantly. With the reduction of meaningless sequences, it is easier for the mining algorithms to discover meaningful patterns. The topology based method can help the algorithms get results in low support while the fixed window method cannot. When adding the topological constraint to the mining procedure, the accuracy of the results is also improved. Fewer but more meaningful results are obtained. The time cost is also reduced as the meaningless patterns are pruned. The lower the support is, the significant the effect of the algorithm is. As a result, we claim that the Topological Constraint based Algorithm is an effective way of improving the accuracy and efficiency of telecom alarm data mining. Based on the conclusion, we can infer that the network model we build for telecom network is a proper model for fault location, as it serves the data transform and mining approaches quite well.

#### FUTURE WORK

After the frequent sequences in the alarm data are accurately mined, it is easy to generate correlation rules, but it is difficult to infer the root fault cause from the mining results. The frequent sequences indicate the alarms have

a very high probability of occurring as the given order. We know that the cause takes place before the effect, but the early events are not definitely the cause of the posterior event.

## REFERENCES

- [1] A.Patel, G.McDermott and C.Mulvihill, "Integrating network management and artificial intelligence", *Integrated Network Management*, North-Holland, Amsterdam, 1989, pp.647–660.
- [2] B.Gruschke, "Integrated event management: Event correlation using dependency graphs", *A.S. Sethi (Ed.), Ninth Internat. Workshop on Distributed Systems Operations and Management*, University of Delaware, Newark, DE, October 1998.
- [3] M. Klemettinen, "A knowledge discovery methodology for telecommunication network alarm databases", 1999.
- [4] J.Han and L.Lakshmanan, "Constraint-Based, Multidimensional Data Mining", *COMPUTER*, 1999.
- [5] D.M. Meira, "A Model For Alarm Correlation in Telecommunication Networks", [Dissertation]. Federal University of Minas Gerais., 2000.
- [6] D.M. Meira and J.M.Nogueira, "Modelling a telecommunication Network for Fault Management Applications", *IEEE*, 2001.
- [7] Agrawal R and Srikant R, "Fast algorithms for mining association rules [A]. Proceedings of the 20th Int'l Conference on Very Large Databases[C]. Santiago, Chile,1994.487-499.
- [8] J.Han, J.Pei and Y. Yin, "Mining Frequent Patterns Without Candidate Generation", *SIGMOD'00*, May 2000.
- [9] J. Pei and J. Han, "Mining Sequential Patterns by Pattern-Growth:ThePrefixSpan Approach", *IEEE transactions on knowledge and data engineering*, 2004
- [10] M. Zaki, S. Parthasarathy, M. Ogihara, and W. Li, "New Algorithms for Fast Discovery of Association Rules", *Proc.3rd Int. Conf. on Knowledge Discovery and Data Mining (KDD'97)*, AAAI Press, Menlo Park, CA, USA 1997, pp. 283–296.
- [11] C.Borgelt, "Keeping Things Simple: Finding Frequent Item Sets by Recursive Elimination", *1st IEEE ICDM Workshop on Frequent Item Set Mining Implementations (FIMI 2003)*, Melbourne, 2003.
- [12] R.Srikant and R. Agrawal, "Mining Sequential Patterns: Generalizations and Performance Improvements", *Lecture Notes in Computer Science*, 1996

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**AN INVESTIGATION INTO ROLE OF COMPETENCY ASSESSMENT THROUGH ASSESSMENT CENTRE IN BUILDING EMPLOYEE COMPETENCY AND ORGANIZATION EFFECTIVENESS: A CONCEPTUAL INSINUATION WITH REFERENCE TO ESCORTS AGRI MACHINERY**

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**ABSTRACT**

**Purpose-**With increasing competition and consistent demand of talented workforce all around a big challenge that has a surmounting pressure over one and all is developing and sustaining key workforce and strengthening the talent pipeline of organization. With changes in every aspect so uncertain and turbulent whether it is technology, structure, task, procedure, customer or society it is difficult to captivate market and sustain leadership, but the only controllable factors are ensuring growth and development of its internal customer and thus ensuring availability of right people.

Competencies being basic traits, attributes and behaviour can be anchored specifically to a task and a position .this helps in providing a comprehensive picture of improving task, people and performance altogether by measuring, mapping and developing people based on organization requirement. Thus the role of competency assessment comes into picture. Assessment centres being a strong facilitator in this regard help in ensuring right assessment through right methods and going promising results.

**Objectives** -With a purpose of understanding the role , relevance and contribution of Competency assessment through assessment centre the following study was conducted on employees who are working as Territory business managers and have to be transformed into Are business managers at Escorts Agri Machinery through competency assessment and assessment centres..

**Findings-** Based on analysis the result emphasize that there is a high focus on competency assessment and development and assessment centres play a pivotal role the centre uses varied tools based on requirement to ensure quick and ensured learning the key attributes important to be transferred in TBM to become effective ABM include- Influencing and persuading , communication and assertiveness, planning and organising, timely execution, achievement orientation, building relationship & networking, empowerment & delegation, team orientation.

**Outcome** - The implications of the study are applicable on one and all organization that look forward through people centric leadership and sustained development.

**Keywords-**Competency assessment, Assessment centres, performance attributes, organization effectiveness

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**AN INTRODUCTION TO ESCORTS GROUP**

The Escorts Group is among India's leading engineering conglomerates operating in the high growth sectors of Agri-machinery, construction and material handling equipment, railway equipment and auto components. Escorts offers a comprehensive range of tractors; more than 45 variants starting from 25 to 80HP. Escort (economy range; 27-35 HP), Farmtrac (fuel efficient; 30-55 HP) and Powertrac (35-75 HP) are the widely accepted and preferred brands of tractors. There are 1362 employees (as active on 1<sup>st</sup> September, 2012) in Escorts Agri Machinery (EAM) & 14 employees are a part of the Human Resources. The annual turnover generated by the Escorts Group is around 3000+ Crores. The employees of Escorts are normally mapped to the following designations or may be role based functional designations. It is constantly developing its workforce through emphasis on innovation & learning, cross-functional team working, high performance culture & by nurturing & capitalizing on the talent of the young workforce.

The Graduate Engineer Trainees are from the top & the premier institutes of the country & they are placed in Knowledge Management Centre (KMC) that is research & development centre. The Diploma Engineer Trainees (DET) are from the good engineering & agricultural colleges located in the small cities & some of them are placed in KMC & the others in Service which requires them to operate from their respective states. The training period for the GET's is one year & high performing individuals are confirmed as Associate Manager at the end of one year. The DET's by the end of two years are confirmed either as an Executive or Assistant Manager. The HR Department also gives opportunities to the Management Trainees (MT's) who are promoted to the G1/G2 grade upon successful completion of their training period.

## **COMPETENCY AND COMPETENCY ASSESSMENT**

Klemp (1980, p21) defined competence as “an underlying characteristic of a person which results in effective and/or superior performance on the job.” or it is “a cluster or related knowledge, skills, and attitudes that reflects a major portion of one's job (a role or responsibility), that correlates with performance on the job, that can be measured with well-accepted standards, and that can be improved with training and development (Parry, 1996, p50).“ All the definitions have two common elements:-

- The competency is an observable and measurable knowledge and skills.
- The knowledge and skills must distinguish between superior performers (or exemplary performance) and other performers.

Competencies identified can help in improving the desired behaviour. Competencies also serve as a mechanism to set reward based on performance and projected potential, like performance based pay; pay based on job family and structure or career family grade. Competencies when defined on the basis of role specification and person specification help in setting standard **for recruitment and selection**. Thus, competency management and assessment has its own defined role in recruitment, selection, T&D, compensation, career planning, Performance management and in all related aspects it thus contributes in effective workforce building and developing strong talent capital. Thus, understanding relevance of competency and its relevance in organization building through preparing key workforce is important.

## **NEED AND RELEVANCE OF COMPETENCY ASSESSMENT WITH RESPECT TO ESCORTS AGRI MACHINERY**

Agri Machinery is keen on undertaking an initiative to rationalize the TBM (Territory Business Manager) level and gradually drop this level from the organization chart. As of now the Organization chart looks like:



The objective of this assessment centre is to drive efficiencies in the way ABM (and TBM) level delivers performance. The result provides:

- Ready to be absorbed ABM's
- Groom-able as ABM's in the near future
- Not groom-able at least in the next 2 years
- Identify the competencies that to be honed
- Making them undergo a specific skill development program to sharpen the identified competencies
- Creating complete gap analysis of
  - High performance – high potential
  - High performance- low potential
  - Low performance and high potential
  - Low performance and low potential

Thus the overall purpose is to determine how different parameters based on job related competencies are identified, relate and developed along with assessing their relevance in the light of competency development and organization effectiveness.

## **OBJECTIVES OF STUDY**

The present study conceptually focuses on initiatives and practices used through assessment centres to develop competencies for developing TBM'S into ABM'S –

The objectives includes-



- 
- a) To understand the relevance of competency management and its role in organization effectiveness
  - b) To identify and understand the focus areas of competency development practiced in this organization and its relevance for the organization
  - c) To understand the role of assessment centres and various techniques/tools used to build competency for selected workforce
  - d) To understand various attributes adopted to assess the competency development of TBM (Territory Business manager) (into ABM (Area Business manager))

### **RESEARCH METHODOLOGY**

The present study conceptually focuses on the aforesaid objectives. The existing batch of TBM presently working at Escorts Agri machinery are target of study.

Sample size - 42 TBM that are filtered and are groomable to be transformed and developed as ABM.

Secondary data-Competency development literature from magazines and periodicals of the organization.

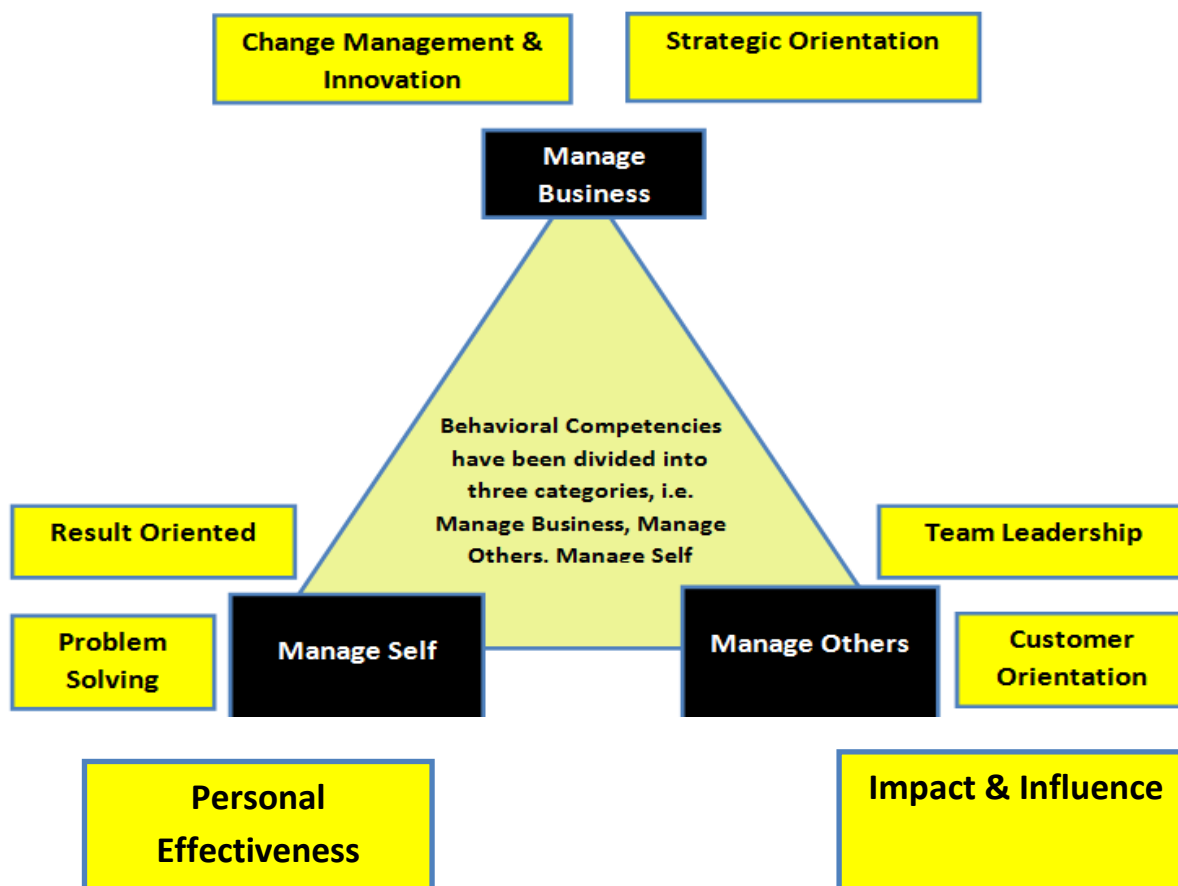
### **A DETAILED CONCEPTUAL FRAMEWORK OF COMPETENCY ASSESSMENT AT ESCORTS**

#### **ROLES & RESPONSIBILITIES (JOB –DESCRIPTION)**

The position of Area Business Manager being significant the following key attributes are thought important

- ❖ Target Achievement
- ❖ Market Share Improvement
- ❖ Plan/Execute/Monitor-BTL Activities
- ❖ Compliance to norms:-
- ❖ Develop Countermeasure for variance with action plans and check for successful implementation.
- ❖ Action Plan for closing high ageing cases (>90 days /or as per regional trade cycle).
- ❖ Channel Management
- ❖ Dealer Selection, Appointment, Induction & Nurturing.
- ❖ Check on the performance of the channel partners and distributors
- ❖ Identifying non & underperforming distributors, initiating necessary & alternative steps to counter them.
- ❖ Enhance Sales, Service & Space capability through effective implementation of Business plan and system at the dealership.

### THE MODEL OF COMPETENCY ASSESSMENT



With respect to **first objective** it is quite clear from the competency assessment model adopted at Escorts that it is a very comprehensive model which focuses on multi-facet aspects with focus on employee, employer, organization brand, T&D, and even routine management skills like managing elf, others, team leadership, problem solving, personal and change and innovation management .Also a strong acumen of developing strategic orientation is also been emphasize in the model.

Thus it can be inferred that the model provides a panoramic view of competency needed in an ABM for contributing effectively in his/her performance and thus contributing in organization effectiveness building thus helping both employee and organization to grow.

With reference to **second objective** the following are the focus areas of the competency assessment tool that helps in effective competency development and thus overall organization building and providing strong source/pool of talent and a diverse workforce.

#### **FOCUS OF COMPETENCY AREAS-**

##### **Manage Business:**

Competencies that are essential for taking Escorts to a higher Growth Trajectory

<b>Change Management &amp; Innovation</b>
Conceptualizing Change
Institutionalizing Change
Adaptability to Change
Practical and Creative Solution

<b>Strategic Orientation</b>
Long Term Focus
Business Orientation
Financial Acumen

Change Management & Innovation is the ability to-

- Challenge status quo, create a business case for change and clearly visualize the desired end state
- Accept change and adapt to different situation and manage challenges of an uncertain environment
- Understand the difference in people's capacity for change and support in the transition process to sustain the change
- Use innovative approaches and method to find practical and feasible solution in a given situation

**Relevance for Escorts:** - This Competency is important since it enable people to understand the significance and implications of change in a constantly evolving business scenario and in ensuring that the change plans get successfully implemented. Further , it helps create a culture of change and innovation, to create practical and feasible solutions as per the needs of the business. The competency enables individuals in managing the everyday challenges of dealing with ambiguity of the unknown and building acceptability towards it.

In the backdrop of the transformation undergoing at Escorts, this competency would help people in understanding the need for change and ably supporting the organization's efforts in facilitating and implementing this change.

**Strategic Orientation** is the ability to, assess long term implications of what is being done today and articulate strategies that need to be adopted/designed to achieve long term goals. Display a macro level understanding of the organizational needs instead of a silo focus on ones own team /departmental objectives

**Manage Others:** Competencies that are essential for managing the various internal and external stakeholders to ensure smooth functioning-

Team Leadership
Development others
Empowerment and Delegation
Team Orientation

Customer Orientation
Understanding Customer Needs
Delivering Customer Service

### **Manage Others (Team Leadership):**

**Definition:-**Team Leadership is the ability to-

- Identify the capability of individuals and delegate appropriate authority and responsibility to allow others to act with a sense of purpose and ownership for outcomes.
- Coach and mentor others continuously and communicate organizational imperatives .
- Demonstrate nurturing and empathic behavior, for solving concerns, correcting mistakes & solving problems and providing team members with a supportive atmosphere to work in.
- Be an active team player and set direction of team towards achieving organizational goals.

### **Themes**

- Empowerment & Delegation
- Developing others
- Team Orientation

### **Relevance for Escorts:**

This Competency is vital in maintaining group morale for delivering highest standards of quality and productivity.

- It highlights the aspiration of Escorts' leadership that seeks to infuse culture of collaborative working amongst individual and departments towards achieving a common goal.
- This competency is differentiating competency which can help in delivering organizational result through a culture of care and nurture of team members that ensure collective growth.

## **CUSTOMER ORIENTATION**

**Definition:** Customer orientation is the ability to-

- Understand the implicit and explicit needs of the customers (Internal and External) and deliver value to customers.
- Responds to customer needs (Internal and external customers) and addresses queries /complaints promptly and efficiently.
- Deliver superior customer experience by proactively catering to customer concerns , monitoring and regularly tracking customer satisfaction and using customer feedback to bring about improvements

**Themes:**

- Understanding customer needs
- Delivering customer service

**Relevance for Escorts:**

This competency is important since it focuses on understanding the real underlying needs of the customer (including both internal and external customers) and striving to deliver superior service to them.

- The competency highlights the importance of serving the customers in Escorts in order to achieve business objectives.
- Satisfaction of the customers would ensure sustained business and greater goodwill for Escorts.
- The competency further highlights the importance of delivering superior value to customers and creating long term mutually beneficial alliances.

## **Manage Self**

Competencies that are essential for managing the various internal and external stakeholders to ensure smooth functioning-

**Result Orientation: -**

**Definition:** -Result Orientation is the ability to –

- Translate goal into workable action plans by allocating targets & using resources optimally and achieve the desired goals with in defined timelines
- Continuously monitor performance and track progress through continuous follow up and coordination with various internal and external stakeholders.
- Focus on outcomes and define challenging goals in order to continuously raise the performance bar.
- Consistently achieving objectives, overcoming obstacles, and striving to the raise the quality of output.

**Themes: -**

- Planning and organizing
- Timely Execution
- Achievement Orientation
- Quality Consciousness
- Process Excellence

**Relevance for Escorts: -** This competency is important since it focuses on creating a drive for achieving results with in the defined timelines and raising the performance bar each time

- Given the ambitious Strategic plans of Escorts, this competency would drive an individual to constantly raise performance standards and strive to achieve higher goals and contribute significantly to the organization's growth
- Also, the competency supports performance in the face of time & resources constraints and various implementation challenges while at the same time meeting and continuously improving the quality of output.

A sense of process orientation is key to continuously meeting and improving the levels of efficiency that is vital for achieving the quality of output/product.

### **Problem Solving & Decision Making:-**

**Definition:-** Problem Solving and Decision Making is the ability to-

- Identify and define the problem, to systematically break it down into interlinked components and prioritize action steps.
- Infer patterns and leverage on past experience to solve the problem by putting seemingly disparate pieces together.
- Make sound and effective decisions, keeping in mind the constraints presented by the situation based on measured assessment of options.

### **Themes:-**

- Analytical Ability
- Timely Decision Making
- Quality of Decisions

**Relevance for Escorts:-** This competency is important since it focuses on devising simple yet effective solutions and taking prompt decisions while factoring in key constraints and concerns.

- This competency thus captures individual's ability to identify the root cause of problem and take timely decisions in the given situation, based on understanding of the constraints involved with each decision.
- For Escorts this competency is important as the individual are faced with various contingencies in their day- to- day activities and hence manage the situation independently.
- This competency ensures faster decision making at Escorts and avoiding delays.
- This also ensures that the quality of decisions taken by people is in line with organizational priorities and that they take accountabilities for various decisions at their respective levels.

### **Personal Effectiveness:-**

**Definition:-** Personal Effectiveness is the ability to-

- Take ownership for and excel in executing tasks to attain favorable outcomes .
- Continuously update one's knowledge and skill in line with changing business needs and roles.
- Demonstrate approachability and openness to others views and opinions.
- Persist and take initiative for achieving results and larger organizational success

### **Themes:-**

- Taking Ownership
- Self Development
- Approachability and openness
- Taking initiative

**Relevance for Escorts:-** This competency is important since:

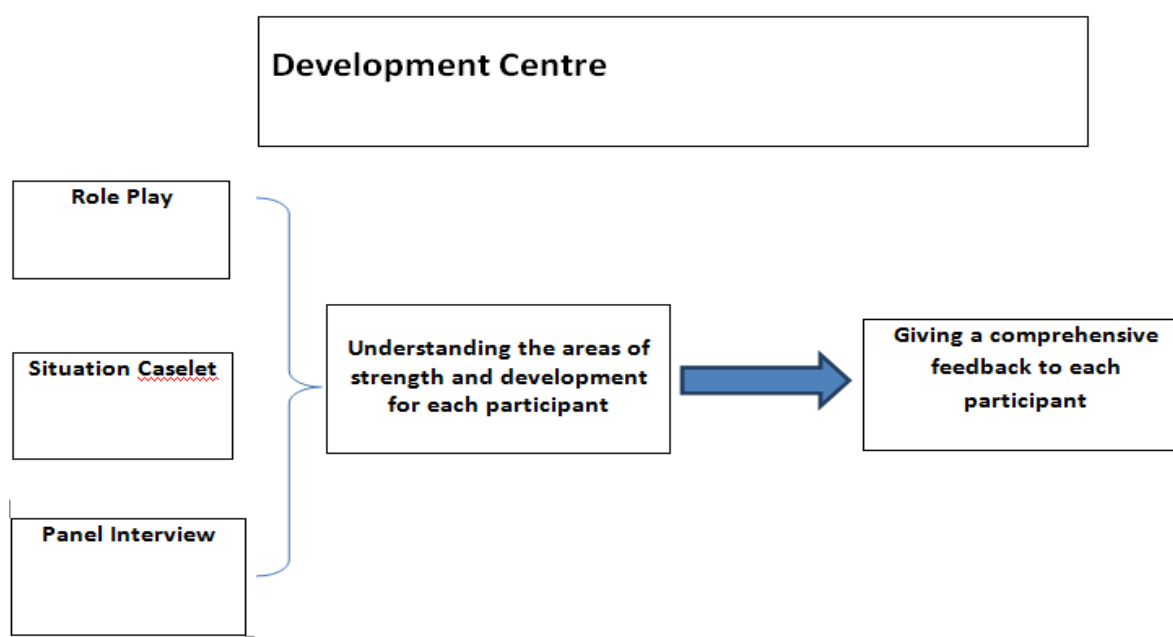
- This competency drives individual towards constantly developing self and upgrading their skills and abilities which would aid in both organizational as well as personal growth.
- This competency also derives the organization in creating a culture of openness and trust for larger organizational success.
- This Competency also drives a sense of ownership among the employees towards the end to end execution of various activities which is essential for Escorts to achieve the challenging goals and objectives that has been set for the future

Thus, the above discussion with key focus on each key competency area highlights the relevance and utility of competency assessment and development with an organization effectiveness perspective.

### A BRIEF FRAMEWORK OF ASSESSMENT CENTRE AT ESCORTS

The Philosophy of Assessment Centre is to take people out of their normal environment and put them through a series of exercises and interviews designed to elicit the behaviors related to relevant competencies. The Assessment Centre is designed using a combination of tools /simulation to understand the unique strength and the areas of improvement of each of the participants. Trained assessors observe behaviors and document their observations systematically and consistently. At the end of the day , the observations from all the simulation are synthesized / integrated by the assessors to create talent profiles for each participant. The Assessment Centre for Escorts Agri consists of various tools that have been designed for assessing the 5 critical attributes.

As per the third objective the present structure of Competency Assessment gives an comprehensive picture of assessment centres and their relevance with an organization perspective. It is quite evident that depending on the need and relevance of area where improvement and training is needed the assessment centres are quite particular about selection of technique and feedback to ensure development.



THE STRUCTURE OF THE DEVELOPMENT CENTRE IS SHOWN IN THE DIAGRAM

### Tools For Assessment

Tools Name	Tool description	Time allotted	Competency measured
<b>Situation caselet</b>	The tool gives an opportunity to the participant to share his approach towards handling the issue at hand	Preparation:30 Min	<ul style="list-style-type: none"> <li>• Planning and Organizing</li> <li>• Timely Execution</li> <li>• Achievement Orientation</li> </ul>

<b>Role play</b>	This involves a role playing scenario where the area manager(played by TBM)interacts with the dealer (played by the assessor) and shares the news related to his performance	Reading:30 Min Role Playing:20 Min Conversation with the Assessor:10 min	<ul style="list-style-type: none"> <li>• Influencing and persuading</li> <li>• Communication and assertiveness</li> </ul>
<b>Interview</b>	Interview provides an opportunity to the assessor to probe deeper into any specific attribute	Discussion: 45 min -10 min for situation caselet discussion-35 min for one to one discussion	<ul style="list-style-type: none"> <li>• Influencing &amp; persuading</li> <li>• Communication &amp; assertiveness</li> <li>• Planning &amp; organizing</li> <li>• Timely execution</li> <li>• Achievement orientation.</li> </ul>

Finally with the designed fourth objective which aimed to determine the key attributes used for converting and developing TBM into ABM the company uses assessment matrix based on assessment centres and for developing TBM into ABM there are main *eight attributes* that are important for ABM (Area Business Managers)-

***Influencing and persuading , communication and assertiveness, planning and organising, timely execution, achievement orientation, building relationship & networking, empowerment & delegation, team orientation.***

All the eight attributes are measured on a scale of 5 important category based on which improvements are suggested-

a)Novice b) Learner c)Practitioner d) Proficient e) Expert

Thus, from above it can be understood that the organization takes special care while finally assessing the key attributes and thus fitting it according to what is basically expected from ABM to contribute and add value to the performance.

## FINDINGS

Based on the framed objectives the following findings can be made –

- There is a high focus on competency assessment and development and assessment centres play a pivotal role in identifying , developing and converting plans into action.
- There is a well defined competency framework that focuses on certain key areas like Change management and innovation, strategic orientation ,result oriented, problem solving, manage others, manage business manage self, team leadership, customers, orientation, personal effectiveness, impact and influence along with its key dimensions.
- The centre uses varied tools based on requirement to ensure quick and ensured learning like interview, situation handling, role play, case lets thus making the incumbent prepared fully before delegating task.
- The key attributes important to be transferred in TBM to become effective ABM include- Influencing and persuading , communication and assertiveness, planning and organising, timely execution, achievement orientation, building relationship & networking, empowerment & delegation, team orientation. When analyzed properly it can be seen that each key attribute has its own defined role in competency development and making a rich talent inventory in an organization.0 Competency framework matched with assessment centres provide a key platform to assess, develop and help organization to grow and sustain key skills and talent with consistently helping talent pipeline to grow and maximize.

## CONCLUSION

Thus from the above discussion it can be concluded that it is not solely the performance management function that helps in effective delivery or improving performance in a consistent way. For effective and promising

results it is important to develop an alignment between job attributes, employee skills, organization requirement, potential of employees and thus transferring all this to profile and performance of employees. In this regard competency assessment helps in providing specific and focussed approach in developing employees in a desired direction. With a set framework it will become easier for organization to ensure growth and development of employees with key attributes thus helping organization in sustainable development.

## REFERENCES

1. Burgoyne (1993), "What competencies does the workplace expect from business graduates? Some perspectives of the top 500 companies". In C. Eames & D. Hodges (Eds.), *Proceedings of the Third Annual Conference of the New Zealand Association for Cooperative Education* (pp. 1–12). Rotorua, New Zealand.
2. Boyatzis (1982) and Klemp (1980) , "Do Assessment/ Development Centres Use Optimum Evaluation Procedures? A Survey of Practice in UK Organizations", *International Journal of Selection and Assessment*, 3(2), pp. 132–40.
3. Faerman, Thompson, and McGrath (1990), "Competences of Australian women in management". *Women in Management Review*, 8(3), 31-35
4. Hoffmann (1999), "The meanings of competency". *Journal of European Industrial Training*, 23(6), 275-285
5. Kravetz,( 2008) ,*Building a job competency database: What the leaders do*. Retrieved June 2012 , from [www.kravet.com](http://www.kravet.com)
6. Lawrence (2002), "Teaching and assessing employability skills through Skills" USA, *Annual Quality congress*, 56, pp 285-295
7. Tu, (2006) [Current main jobs for technological-vocational education], 176. Retrieved Nov. 20 2012, from <http://140.131.45.125/News/2007010910.asp?>
8. Wood and Payne (1998), "Competency based Recruitment and Selection", New York, John Wiley & Sons



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## **NON-MONETARY RECOGNITION AND EMPLOYEE PERCEPTION: THE ROLE OF TOP MANAGEMENT**

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### **ABSTRACT**

*The paper explored the phenomenon of non-monetary recognition from the perspective of employees and employers. Role of leadership was assessed in influencing employee perception of non-monetary recognition. A qualitative exploratory study was conducted with the cases of one Indian and another American multinational within the FMCG sector in India. The findings illustrate the influence of leader's beliefs towards employee's perception and perceived value of non-monetary recognition. The study also serves a pointer to the insular mindset of Indian leaders as regards employee recognition.*

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### **INTRODUCTION**

In an economic scenario where cult organisations are witnessing unprecedented losses and where economy is unable to pull through the repercussions of global recession, the individual and organisational growth prospects appear dismal. To get through the aftermath of economic recession the organisations are resorting to cut in frills and perks for employees, extension of work hours and lay-offs are at never before levels. This adds to the despair of employees who are facing hard-hitting challenges in the already bleak job market.

One of the greatest challenges in resurrection of economy lies in recuperating the employee sentiment and making the workforce motivated and productive. It needs to be reaffirmed here that monetary aspects alone cannot guarantee that achievement. In the financial year 2006-2007, the sectors that witnessed the highest pay raises (Financial sector) in India, and the one that gave the lowest pay hikes (Business Process Outsourcing), were the sectors that also witnessed the highest attrition rate in the country. (Anand 2007 Business world p.30) This implies that monetary rewards hardly play any role in keeping employees loyal to an organisation. In the words of K. Srinivas, GM-HR Bajaj Auto, India, "*Compensation is only a hygiene factor. Bad compensation will lead to higher attrition, but good compensation will not necessarily lead to higher retention.*" (Anand 2007 Business world pp. 30-31) It is also needless to mention that cash rewards become an entitlement and cease to motivate further. (See Jeffrey 2003, Nelson 2001)

Moreover with the slump in economy, traditional rewards cannot certify even reasonable return on investment. organisations need to rise above regular rewards and focus on psychological needs of individuals through employee recognition. In the words of Jim Harter of Gallup, "*Recognition helps people to be resilient. Businesses right now...they're trying to survive. And to survive you've got to have some psychological resilience. You've got to have employees who are positive despite the negative situations around them....I would argue that recognition is even more important in times like this.*" (Globoforce 2008) Employee recognition provides a sense of identification for the employee and also engages the individual with the goals and objectives of the organisation.

The philosophy of recognition to succeed however needs to cascade from top, which necessitates participation of managers at high echelons of organisation. Leadership and its role has been extensively researched and discussed in the varied domains of management. This paper will highlight the role of leadership in the realm of employee recognition and will discuss the possible implications.

### **RECOGNITION AND RAISON D'ÊTRE**

*"You help the marathon runner the most by offering encouragement and nourishment along the track, not just by waiting at the finish line with a trophy. Recognizing effort has a bigger impact than giving a prize at the end of the race. Same goes for employees, who are in a race everyday." - Alex Hiam*

As one of the basic psychological needs of humans, recognition as a phenomenon has found profound interest amongst psychologist and other researchers. Its relevance to organisational studies is augmented due to its direct implication on productivity. Diverse issues have been studied and are a testimony to its relevance in fuelling performance. Employee attitudes about job factors are studied (See Lindhal 1949, Herzberg et al 1957, Keller 1965, Ronan 1970) along with Employee job preferences and ranking of job factors (See Jurgensen 1978, Kovach 1980, Mottaz 1980) to illustrate the growing significance of non-monetary aspects in the work life of employees. Impact of recognition on performance is empirically established (See Luthans and Stajkovic 2000, Nelson 2001) Significance of tangible gifts in motivating performance is also ascertained (Condly, Clark and Stolovitch 2003, Jeffrey 2003) It is also confirmed as to how employee recognition needs require better

focus from management (Yavuz 2004, Martiz Research Inc 2005). Besides a growing number of researches by leading firms concede to the increase in practice of such recognition processes. (Study of changing workforce, US (1993 in Nelson 2001 p.19); Robert Half International (1994 in Nelson 2001 p.19); Strategic Rewards Survey by Watson Wyatt (2000); Martiz Research Inc (2005); Globoforce(2008) )

## **LEADERSHIP AND RECOGNITION**

*“To be a leader is to be able to move masses”- Adolf Hitler*

The number of studies delving into leadership speak volumes about its significance. Donelson Forsyth (2006) consolidated various researches and characterized leadership as being reciprocal, transactional, transformational, cooperative and adaptive. (p. 376) The transformational nature of leadership demands the leader to enhance the subordinate's motivation and satisfaction. Rewards and Recognition form one such tool to be harnessed by leaders and as such many associations have been investigated.

Relationship between leader's use of contingent reward and group processes and productivity is established. Group cohesion, drive, and productivity were found to be positively related to leader contingent reward. Contingent punishment also had a positive effect on group's productivity. (Podsakoff and Todor 1985) Another study however contends this relationship and asserts that charismatic leadership transcends the role and significance of contingent reward in influencing performance. (Waldman, Bass and Yammarino 1990) Further research provides support for leader's use for contingent reward and contingent punishment and avoidance of non-contingent punishment. Use of contingent reward and punishment was found to enhance subordinate's performance and also had a positive effect on supervisor's perception of leader's expert and referent power. Use of contingent punishment enhanced perception of leader's legitimate power. (Hinkin and Schriesheim 1994)

Other domains of motivation for a leader (other than contingent rewards) are also explored. According to Rowley Mayfield et al. (1998), supervisor's use of motivating language correlated significantly with subordinate's performance and job satisfaction. A survey conducted on nursing staff attested to the positive influence of superior's use of motivating language on the subordinate's performance and job satisfaction.

Kyle Luthans (2000) illustrates, through a survey study of 254 employees, strong support for use of non-monetary recognition practices for effective leadership. He asserts that recognition is “a powerful, but often overlooked, leadership tool to improve employee performance.” (p.31)

Jack and Suzy Welch (2005) have also asserted the significance of rewards and recognition as an integral element of leadership. *“Vision is an essential element of the leader's job. But no vision is worth the paper its printed on unless it is communicated and reinforced with rewards. Only then will it leap off the page- and come to life.”* (p.69)

## **RESEARCH PARADIGM AND METHODOLOGY**

The research intended to build up a holistic comprehension of the phenomenon of non-monetary recognition from the perspectives of both the employer and the employees. The objective was to identify the factors that shape an individual's perception towards non-monetary recognition. organisational philosophy and practices were studied to develop the organisation's viewpoint as regards employee recognition.

The study can be traced within the qualitative paradigm with the ontological assumption of reality being subjective. Epistemology entailed studying individual employee perceptions and organisational philosophy as regards employee recognition. Inclusion criterion for the selection of organisations was existence of an established non-monetary recognition program with a minimum of five years of operation. The organisations under study were from the same sector (FMCG) and were both profit making. A comparative analysis of Indian and Foreign organisations was sought and as such one Indian and another American firm were chosen. Employees (managerial cadre) were selected through theoretical sampling within the organisation with the criterion of at least one year of stay with the organisation.

Data collection was done through interview guide with a different set of guide for employees and the employers. Representatives of management from HR and other higher cadre managers were targeted to present the employer's point of view.

Data analysis involved categorization of data and building a set of concepts and themes as regards non-monetary recognition. Inductive logic of enquiry was adopted. The objective was to classify the data and interconnect the concepts and point out the emerging relationships. Data analysis aimed at rich description of the phenomenon of non-monetary recognition.

## NON-MONETARY RECOGNITION PRACTICES AT THE TWO ORGANISATIONS

In the case of the **Indian organisation**, a limited framework of non-monetary recognition programs was in use. At the *Factory level* there were rewards for innovation, punctuality, attendance, meeting production targets, and meeting quality targets. The award item was generally a trophy along with a token amount of Rs501(USD 10.19).

*Sales awards* constituted the generic platforms like Best Territory, Best Operations team, Best Production team at the regional and national level. The reward comprised a trophy and a certificate handed over by the President. Spot recognition was exercised through a set of items with the tag “Good Job Done”. This was handed over by the manager to the subordinate for an exceptional performance or effort.

At the *corporate level*, the organisation adopted a practice of giving cards to members who go beyond their scope of work to help another member. This was a way to show gratitude to one’s fellow member. One of the cards was called the IVY, which stood for ‘I Value You’ and the other was called the WAY, which stood for ‘We Applaud You’. These cards were used by the organisation as a means of recognizing employees’ efforts as well as reinforcing the values of the organisation in the employees.

The **American organisation** however provided a comprehensive structure of non-monetary recognition platforms which was fortified by the organisation’s winning culture. At the factory level other than quality, attendance, punctuality rewards, there were recognition programs for family members for any outstanding achievement.

At the individual level rewards comprised *Innovator Reward*, *Cost Saver Reward*, *Best Profitability Improvement Plan*, *Challenge of Champions (Sales Award)*, *Ring of Honor Awards* and *Star/ Spot Rewards*.

At the team level, there were rewards for the *Best Manufacturing Team*, *Best Quality Team*, *Best Shipping Team* and *Best Support Team*.

Spot recognition was done at the discretion of every manager who was provided with a budget for recognition. This could vary from a T-shirt, to a free dinner with family, to a gift voucher or even a holiday trip to an exotic locale. The philosophy behind spot recognition was to acknowledge exemplary performance and celebrate the achievement so as to reinforce the desired behavior. Employee recognition through emails and company’s news letter were frequent and a part of everyday practice in the organisation.

In addition to these, there were the three main non-monetary rewards, which were the Ring of Honor Awards. The lowest stage of this reward was for the individual exhibiting outstanding performance at the regional level, called the Management Unit Ring of Honor (MUROH) Award. The second level was for exceptional performance at the national level, called the Business Unit Ring of Honor (BUROH) Award. These rewards included a token of a gold ring and a certificate conferred by the head of the company in the country. The highest and the most coveted award in the company was the President’s Ring of Honor Award (PROH). This was the premier reward that an employee could achieve in the organisation and included a considerable sum of Rs1 Lac Cash (USD 2033.76), a company sponsored trip to US, a gold ring and a certificate handed over by the Chief Executive officer of the organisation. This was done in a grand ceremony at the international headquarter of the organisation in US. This was the most coveted award for employees as it carried great prestige and honor for them.

Over and above these platforms, the organisation nurtured a culture of celebration and as such every small or big achievement was given its due credit.

## RESULTS AND DISCUSSION

The results will be discussed in the light of research objectives as undertaken in the study.

### 1) Factors influencing the organisation’s reward and recognition philosophy

Through in-depth discussion with management representatives and employees, it was ascertained that the reward and recognition philosophy was influenced by two primary factors i.e. the top management's belief in recognition and the organisation's values. American organisation believed in nurturing talent and espoused a culture of celebrating achievement; the reward philosophy was a derivative of its values and culture and consequently the organisation supported an extensive framework of non-monetary recognition programs. Top managers recognized the significance of celebration in adding enthusiasm at workplace, and to quote a representative, *"The celebration of achievement is core to our philosophy. No meeting or gathering of people is complete without an element of celebration."* The organisation associated a sense of pride with rewards and as such used these platforms to reinforce desired behavior.

In the case of the Indian enterprise, the chief executive believed more in monetary rewards and as such limited non-monetary benefits were existing in the organisation. In the words of the HR Director, *"Honestly, acknowledging, valuing, praising, recognizing, does not come easily to this organisation. Other places it may be easier but it is definitely an issue here."* Similar concerns were evident through the findings of Gallup survey which warranted immediate attention to the recognition program in the organisation. The results of the Gallup survey led to the genesis of non-monetary recognition platforms in the Indian organisation; these programs were more of a reactive step on part of the organisation than deliberate or strategic. As expected, the organisation culture did not shore up the recognition practices.

## **2) TOP MANAGEMENT'S BELIEFS**

Analysis of data points towards differences in the leadership style and beliefs of top management. Top management at the American organisation indicated towards a more transformational style than transactional which was apparent in the Indian leader. Managers from the American firm were found to be active in appreciating subordinates and peers and were setting precedent for their counterparts. Recognition was a universal phenomenon across the organisation and was essentially emphasized by the leader.

The leader of the Indian organisation was however reactive and as such praise and acknowledgement of efforts was a rare exercise at the organisation. The lack of faith in recognition was evident in the leader's rare participation in such forums.

Although the differences in the leadership of the two analogous organisations were not called for; the reasons for the glitch could be manifold. Indian leadership has started to experience fierce competition since the opening up of economy. As a result the leadership has yet to transcend the parochial outlook and explore the larger dimensions of employee and organisational growth. American organisations have on the contrary witnessed greater challenges and have savored better work practices. Proactive ways of management are instilled in their culture which gets echoed in the leadership as well. Moreover research in the field of non-monetary recognition is at a nascent stage in India; the scarcity of researches in the field is evidence to its emerging status as a research concern in the country. This bears implications for non-monetary recognition practices for Indian organisations, which focus more on traditional methods of rewarding.

## **3) FACTORS INFLUENCING EMPLOYEE'S PERCEPTION OF NON-MONETARY RECOGNITION**

Employee demographics did not significantly influence employee's perception of non-monetary recognition; married or single women had almost the same perception and choices as married or single men. Career advancement, interesting assignment and monetary gains were the primary elements to look for in job. Even years of experience and career stage did not seem to influence employee perception. The differences however, emerged with the inter organisation differences.

The employees from the American organisation were found to be passionate about recognition programs and asserted its significance in their work life. The organisation advocated people oriented values and fostered a culture of recognition and celebration. The culture was apparent in the avid responses of the employees across the organisation. Words like 'cool', 'essential' and 'refreshing' were used to express their feelings about recognition programs. One of the managers asserted, *"After twelve hours at work, if you get a small acknowledgement from boss, it is enough to lift your spirit."* Sponsoring the organisation's agenda, one of the managers claimed, *"The entire journey should be entertaining; one should not just celebrate after reaching the destination"*. The employees in the American organisation thus perceived the non-monetary recognition forums as valuable.

However in the case of Indian organisation, where the organisation philosophy emphasized monetary payment and exercised non-monetary options to a restricted level, the employees gave a lukewarm response to any such recognition programs. In the words of a manager, *"These are mere add-ons; they do not make much difference to my work."* Employees at the Indian firm were found resistant to praise and appreciation. It was asserted that doing a good job was mandatory and hence did not merit any special handling. Some of the employees went on to aver that recognition was *"just a feel good factor and not the core"*; *"I don't want to be appreciated often; it disturbs me"*.

These findings, if assessed from a tapered view, may bring cheer to Edward Deci and Alfie Kohn and other followers of intrinsic motivation and theory of self-determination; however when analyzed in the backdrop of organisation's philosophy and leadership, they may unearth new relationships.

#### **4) EMERGING RELATIONSHIP AND ITS RELEVANCE**

As apparent, the research presents a link between employee's perception and perceived value of recognition programs and the top management's belief in the power of recognition. It can be categorically asserted from the results that leaders need to be sensitive to employee's needs and must accordingly change their behavior. However the findings also solicit a response towards such necessity of change. It needs to be ascertained that if the two organisations under comparison were top performers and both were registering profits why is an attention on recognition needs of employees stipulated by the study.

The response can be sought in the growth of non-monetary recognition practices across globe and in the psychological need of recognition for human beings. It has been empirically established by organisations like Gallup that employee recognition is an integral part of employee engagement initiatives and as such forms the hallmark of a productive organisation. Better engaged employees are found to be more productive and as such recognition initiatives are sought after by organisations.

Moreover, the human need for relatedness has been stressed by almost all the psychologists. It is of utmost significance to an individual and even though the results assert that employees from the Indian organisation did not need recognition, the findings of the Gallup survey in the organisation cast a contrasting picture. The organisation scored extremely low points on recognition in the survey and as a hasty measure by the management, non-monetary recognition practices were set in. Inopportunely these could not be buttressed by an encouraging management attitude and as such the perceived value of such initiatives was low for employees. The return on investment of effort by HR managers remained negligible as recognition initiatives were not perceived as important by the employees and were described as 'ok', 'feel good', and 'mere add-ons'. Genuineness of programs would have been reflected by an active participation by top management, but they remained conspicuous with their absence.

Redefining of recognition programs is hence essential for the success of organisations and leadership involvement is imperative lest the practices appear phony to employees.

#### **CONCLUSION AND IMPLICATIONS**

The findings of the study point towards the role of leaders in influencing employee perception and the perceived value of non-monetary recognition. Top management that believed in the power of recognition espoused a supportive culture and consequently employees valued the recognition received. The findings however need to be viewed with caution as the research paradigm permitted limited generalizability. The findings were true to the milieu under study but replication to other contexts may be an uncertainty unless tested empirically.

Nevertheless the implications are critical. It is of concern for leaders to check their belief system if recognition programs are to be effective. Beliefs are evident through behavior and no amount of effort can alter a façade into an honest act. The study points to the status quo of recognition practices in Indian organisations and warrants pressing need to sensitize the leaders towards the latest trends in managing and motivating employees. Sporadic attempts will not serve any purpose; rigor needs to be demonstrated by leaders such that non-monetary recognition practices can be optimally utilized towards a symbiotic relationship between the organisation and its employees.

#### **REFERENCES**

Anand M, 2007, 'How fairly are you paid?' *Businessworld*, 5<sup>th</sup> February, pp. 28-38

- Condly Steven J, Richard e Clark and Harold D Stolovitch, 2003, 'The Effects of Incentives on Workplace Performance: A Meta-analytic Review of Research Studies', *Performance Improvement Quarterly* Vol.16, No. 3, pp. 46-63 retrieved on 11<sup>th</sup> May 2006 from [http://www.ispi.org/pdf/Vol16\\_03\\_46condly.pdf](http://www.ispi.org/pdf/Vol16_03_46condly.pdf)
- Forsyth Donelson R, 2006, *Group Dynamics*, 4<sup>th</sup> edition, Thomson Wadsworth, India Edition Akash Press, Delhi
- Globoforce 2008, 'Maximize the Return on Recognition during a Recession', *The White Paper*, Issue 8, December, retrieved on 27<sup>th</sup> December 2008 from [www.globoforce.com](http://www.globoforce.com)
- Herzberg Frederick, Bernard Mausner, Richard O Peterson and Dora F Capwell, 1957, *Job Attitudes: Review of Research and Opinion*, Pittsburgh, Pennsylvania, Psychological Service of Pittsburgh
- Hiam Alex, 2002, Employee Recognition: Why it Matters? Retrieved on 23<sup>rd</sup> December 2005 from <http://www.entrepreneur.com/humanresources/managingemployees/motivationandretention/article52950.html>
- Hinkin Timothy R. and Chester A. Schriesheim, 1994, 'An Examination of Subordinate-Perceived Relationships Between Leader Reward and Punishment Behavior and Leader Bases of Power', *Human relations*, Vol. 47, No. 7, pp. 779-800, DOI: 10.1177/001872679404700702, retrieved on 17<sup>th</sup> September 2007 from <http://hum.sagepub.com>
- Jeffrey Scott, 2003, retrieved on 26th Dec. 2005 <http://www.maritzrewards.com/pdfs/site-benefits.pdf> Copyright with The SITE Foundation
- Jurgensen Clifford E, 1978, 'Job Preferences (What makes a job good or bad?)', *Journal of Applied Psychology*, Vol. 63, No.3, pp. 267-276
- Keller Ellis O, 1965, *Management Development: A series of lectures & articles*, New Delhi, National Productivity Council.
- Luthans Fred and Alexander D. Stajkovic, 2000, 'The Impact of Recognition on Employee Performance: Theory, Research and Practice', retrieved on 17<sup>th</sup> June 2006 from <http://www.sba.muohio.edu/management/mwAcademy/2000/38a.pdf>
- Luthans Kyle, 2000, 'Recognition: A Powerful, but often Overlooked, Leadership tool to improve Employee Performance', *Journal of Leadership and organisation studies*, Vol.7, No.1, pp.31-39, DOI: 10.1177/107179190000700104, retrieved on 26<sup>th</sup> September 2007 from <http://jlo.sagepub.com>
- Martiz Poll on Employee Recognition, October 2005, *Bosses Not "On The Same Page" As Employees Regarding Recognition*, Retrieved on April 4, 2007 from [http://www.recognition.org/associations/5847/files/martiz\\_poll\\_2005.pdf](http://www.recognition.org/associations/5847/files/martiz_poll_2005.pdf)
- Mayfield, Jacqueline Rowley, Milton Ray Mayfield and Jerry Kopf, 1998, 'The Effects of Leader Motivating Language on Subordinate Performance and Job Satisfaction', *Human resource Management*, Fall/Winter, Vol.37 (3&4) pp.235-248 Copyright 1998 John Wiley & Sons Inc.
- Mottaz, Clifford J., 1985, 'The Relative Importance of Intrinsic and Extrinsic Rewards as Determinants of Work Satisfaction', *The Sociological Quarterly*, Vol. 26(3), pp.365-385
- Nelson Bob, 2001, *Factors that Encourage or Inhibit the Use of Non-Monetary Recognition by U.S. Managers*, Ph.D. Thesis, retrieved on 31<sup>st</sup> Jan 2006 from [www.nelson-motivation.com](http://www.nelson-motivation.com)
- Podsakoff Philip M. and William D. Todor, 1985, 'Relationships between Leader Reward and Punishment Behavior and Group Processes and Productivity', *Journal of Management*, Vol. 11, No. 1, pp. 55-73, DOI: 10.1177/014920638501100106 retrieved from <http://jom.sagepub.com> on 17<sup>th</sup> September 2007
- Ronan, W.W., 1970, 'Relative Importance of Job Characteristics', *Journal of Applied Psychology*, Vol. 54(2), pp.192-200
- Waldman David A., Bernard M. Bass and Francis J. Yammarino, 1990, 'Adding to Contingent-Reward Behavior: The Augmenting Effect of Charismatic Leadership', *Group and organisation Studies*, Vol.

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15, No. 4, December, pp.381-394, DOI: 10.1177/105960119001500404, retrieved on 17<sup>th</sup> September 2007 from <http://gom.sagepub.com>

Watson Wyatt Survey, Strategic Rewards Survey 2000, retrieved on 13th January 2006 <http://www.relojournal.com/current%20Issue/toc.htm>

Welch Jack with Suzy Welch, 2005, *Winning*, London, Harper Collins Publishers.

Yauz Nilay, 2004, 'The use of Non-Monetary Incentives as a Motivational tool: A survey study in a public organisation in Turkey' retrieved on 17<sup>TH</sup> June 2006 from <http://etd.lib.metu.edu.tr/upload/12605141/index.pdf>

## HUMAN INTRUSION DETECTION BASED ON EMBEDDED PROCESSING OF RSSI

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### ABSTRACT

*A wireless sensor network, the received signal strength indicator has been traditionally exploited for localization, distance estimation, and link quality assessment. Recent research has shown that, in indoor environments where nodes have been deployed, variations of the signal strength can be exploited to detect movements of persons. Moreover, the time histories of the received signal strength indicator of multiple links allow reconstructing the paths followed by the persons inside the monitored area. This approach, though effective, requires the transmission of multiple, raw received signal strength indicator time histories to central sink node for off-line analysis. This consistently increases the latency and power consumption of the system. The latency and power consumption of the system are minimized by transmitting to the sink node only the alerts related to significant events. Moreover, power consumption is further reduced through a high accuracy time synchronization protocol, which allows the nodes to keep the radio off for 60 % of the time. During the tests, the system was able to detect the intrusion of a person walking inside the monitored area and to correctly track his movements in real-time with a 0.22 m average error. Possible applications of this application include surveillance of critical areas in buildings, enhancement of workers safety in factories, support to emergency workers or police forces in locating people e.g. during fires, hostage situations or terrorist attacks.*

### 1. INTRODUCTION

Despite becoming the enduring technology for navigation and tracking purposes, the global positioning system (GPS) presents also some limitations, Nowadays, device-free localization (DFL) and tracking of people in indoor environments could potentially be exploited in a variety of applications, such as tracking of customers in shopping malls with the aim to analyze their reaction to products and advertisements placement, detection of intruders in critical buildings or infrastructures, localization of e.g. besiegers and hostages during sieges and of civilians during fires, and to enhance workers safety in industrial halls with moving machineries. Wireless sensor networks (WSNs) represent a suitable technology to perform these tasks. A feasible solution is to extract useful information from the variations of the received signal strength indicator (RSSI) caused by the presence and movements of individuals inside the monitored area. Since in this case additional sensors such as cameras or infrareds are not used, the nodes forming the wireless network can be considered as radio frequency (RF) sensors. Compared to traditional wired surveillance systems such as optical and infrared imaging systems, WSNs consistently reduce both the installation time and cost, and can easily be redeployed in another area of interest if needed. Moreover, the limited cost of a single device makes it possible to deploy a large number of nodes covering an extensive area with a limited amount of money.

### 2. RECEIVED SIGNAL STRENGTH INDICATOR (RSSI)

In wireless communications, RSSI is a measurement of the signal strength in the received radio signal. The RSSI measurement provided by the RF transceiver is unitless, where the maximum value depends on the supplier and the range of RSSI values provided by the vendor is relative to the actual power, which is expressed in mW or dBm. However, each supplier provides their own accuracy, scale, and offset level for the measurement. The RSSI measurement is the relative power in decibels (dBm) to the measured power Referenced to one milliwatt (mW). Zero dBm corresponds to one mW, and to double the power means an increase of roughly 3 dBm. Respectively, to decrease the power in half is analogous to lowering the power by -3 dBm. The power in dBm can be expressed as a function of the power in mW as follows:  $P_{dBm} = 10 \log_{10} P_{mW}$ ,



**Table 2:** Typical output power levels of different radio technologies [Wikipedia dBm, 2010]

dBm	Power	Example
80	100 kW	Transmission power of a FM radio station with a range of 50 km
33	2 W	Maximum output power from a UMTS/3G mobile phone
20	100 mW	Transmission power of Bluetooth Class 1 radio, range 100 m
15	32 mW	Nominal WLAN transmission power of a laptop
4	2.5 mW	Transmission power of Bluetooth Class 2 radio, range 10 m
0	1 mW	Transmission power of Bluetooth Class 3 radio, range 1 m
-10	100 $\mu$ W	Typical maximum received signal power of WSNs
-70	100 pW	Typical received signal power range of a WLAN

radios, so additional sensors are not needed. In addition, it doesn't require additional power consumption. The use of RSSI is extensive as it has been utilized for radio link quality assessment, nodes localization surveillance applications packets reception rate modeling and transmission power control. Despite the vast usage of the RSSI, the dynamics of this measurement are still difficult, if not impossible, to predict or model. Many parameters can influence the measure: in addition to multipath, fading, and shadowing, the transmitter and receiver variability, as well as the antenna orientation, can impact the measured RSSI value Moreover, the nodes spatial displacement and the surrounding environment contribute to RSSI variation.

### 3. SENSOR NETWORKING PLATFORM

The RSSI measure provided by the radio module is also analyzed more closely since it represents the basis of the entire work. The MCU provides one 12 bit analog-to-digital converter (ADC), with up to 8 channels simultaneously, each having a voltage range of 0-3.3 V, and two 12 bit digital-to-analog converters (DACs) with a voltage range of 0-2.5 V. The radio module is a ZigBee, IEEE 802.15.4 compatible, Chipcon CC2420 transceiver (CC2420, 2010), operating in the 2.4 GHz ISM band, having a theoretical 250 kbps bandwidth. The platform runs the Free RTOS real-time kernel and Nano Stack v1.0.3, a flexible 6LoWPAN protocol stack that implements the layers of the communication stack. The dimensions of the wireless networking platform are 40 x 50 mm and it is powered by two AA batteries. The sensor networking platforms are equipped with an external Omni directional antenna providing a 5.0 dBi gain.

#### 3.1 CC2420

The CC2420 radio transceiver is designed for low power and low voltage wireless communications. The radio module provides extensive hardware support for packet handling, data buffering, burst transmissions, data encryption, data authentication, CCA, link quality indication (LQI) and packet timing information and these features reduce the load of the host MCU. The RF transceiver operates in the 2400-2483.5 MHz frequency range, and it utilizes DSSS for spreading and offset quadrature phase-shift keying (O-QPSK) for modulation. Power consumption of the radio module is very low (receiving mode: 18.8 mA, transmitting mode: 17.4 mA and it has high sensitivity (down to -95 dBm). Some key features of the CC2420 are programmable output power and channel selection in 5 MHz steps, LQI, and RSSI. (CC2420, 2010)

#### 3.2 RSSI

The IEEE 802.15.4 physical layer provides an estimate of the power of a signal received within an IEEE 802.15.4 channel (IEEE 802.15.4, 2010). This measurement, called RSSI, is an 8 bit integer value. In accordance with the IEEE 802.15.4 standard, the RSSI value is calculated as the average received power over an 8 symbol period (128  $\mu$ s). The receiver has to be enabled for at least 8 symbol periods (128  $\mu$ s) for the measure to be valid, and the validity is indicated with a status bit called RSSI\_VALID. The 8 bit RSSI measurement in dBm is stored in a register of the radio module called RSSI.RSSI\_VAL and the value is computed as follows:

$P_{dBm} = \text{RSSI\_VAL} + \text{RSSI\_OFFSET [dBm]}$ ,

where RSSI\_OFFSET is an experimental constant (approximately -45 dBm) derived during the radio module development. The dynamic range of the RSSI is approximately 100 dBm, from -100 dBm to 0 dBm. The RSSI

values measured by the CC2420 transceiver behave in a linear fashion, but the radio module includes also multiple nonlinear regions. The RSSI measure provided by the transceiver has a  $\pm 6$  dB accuracy of the actual received signal strength value. (CC2420, 2010)

### 3.3 Radio channel characteristics of the 2.4 GHz frequency band

This frequency band is shared among several coexisting standards which can interfere one another. Possible sources of interference for IEEE 802.15.4 are IEEE 802.11, Bluetooth, microwave ovens, etc (ZigBee, 2010). In the following sections, the overlapping frequency spectrums of IEEE 802.11b and IEEE 802.15.4 standards are described and interference of IEEE 802.11b to IEEE 802.15.4 is analyzed. To maximize the performance of the WSN, an interference free channel was found and used during later tests.

#### 3.3.1 IEEE 802.11b and IEEE 802.15.4 frequency spectrums

The IEEE 802.11b and IEEE 802.15.4 standards both operate in the unlicensed ISM frequency band where bandwidth allocation is not guaranteed. The IEEE 802.15.4 divides the 2.4 GHz band into 16 channels having a bandwidth of 2 MHz each and the channels are separated by intervals of 5 MHz correspondingly, the IEEE 802.11b divides the frequency spectrum into 13 channels having a bandwidth of 22 MHz each and spaced only 5 MHz apart. Since the channels of the two standards are overlapping, only few channels of IEEE 802.15.4 are interference free. Figure 6 illustrates the frequency spectrums of IEEE 802.11b and IEEE 802.15.4. According to Figure 6, channels 15, 20, 25 and 26 of IEEE 802.15.4 do not overlap with the channels used in IEEE 802.11b. Because of the shared frequency band, it is plausible that coexisting systems can interfere, as demonstrated in Srinivasan *et al.*, (2006a), where the interference of IEEE 802.11b to IEEE 802.15.4 was revealed. In the experiments, time synchronized nodes were used in order to measure the spatial correlation of the noise sensed by the nodes. The high correlation between the nodes confirmed its external origin. To prove that the noise was generated by the coexisting IEEE 802.11b network, the measurements were collected with and

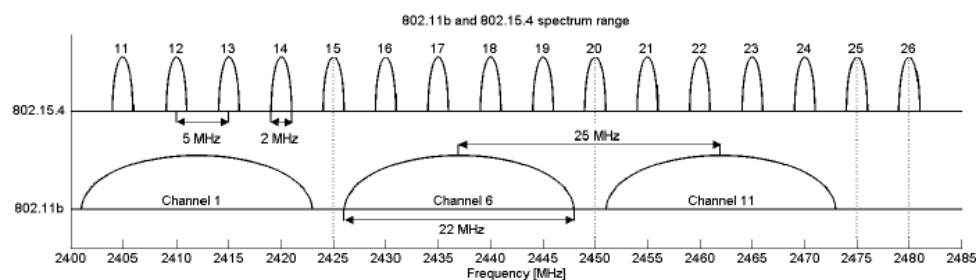
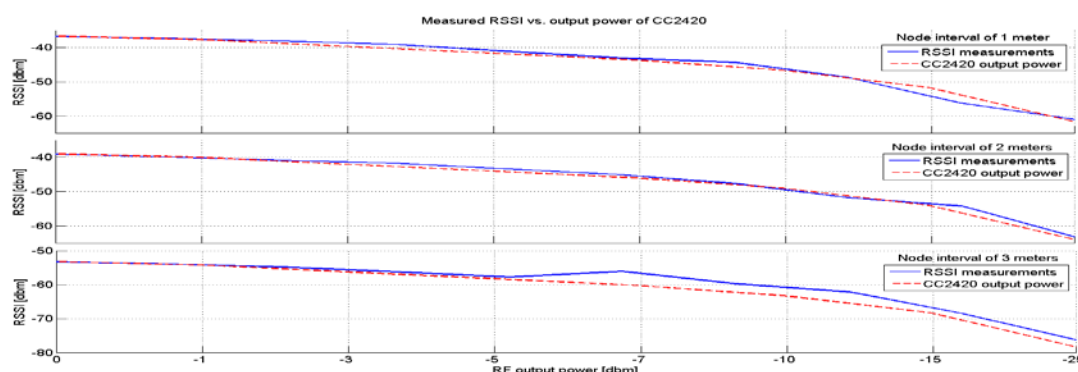


Figure 6: Channel spectrum of IEEE 802.11b and IEEE 802.15.4

without shielding the nearby IEEE 802.11b access points. The conclusion was that the noise was generated by the WLAN, and also that the packet losses in the IEEE 802.15.4 network are highly correlated over short time periods, but are independent over longer periods of time.

#### 3.3.2 Transmission power

The Chipcon CC2420 radio module defines eight different output power levels (CC2420, 2010), ranging from -25 dBm to 0 dBm. The output power can be selected at the application layer of NanoStack as a percentage value from 0 to 100 %, where 100 % corresponds to 0 dBm and ~10% corresponds to the minimal output power of -25 dBm. The expected strength of the radio signal with given transmission power in dBm is given by:



The measured RSSI values match the expected signal strength at high output power levels, but show deviation at lower output power levels. All measurements show a nonlinear region when the received signal strength is between -50 and -60 dBm. The results imply that RSSI behavior is mostly linear, apart from multiple nonlinear regions. Since the nonlinearities existed for all the nodes that were tested in the work, the conclusion was that the systematic errors in the RSSI measurements were introduced by the CC2420 radio.

### 3.3.3 Distance

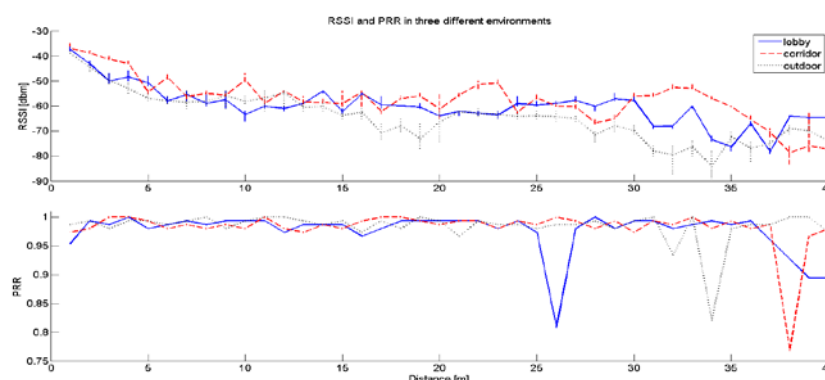
The results listed in the previous section demonstrated that the RSSI measurements collected at a given position decreased as the output power was reduced. The impact of distance can already be observed, where the nodes located further away collected lower RSSI measurements. However, the test setup was not adequate to study the effect of distance on the RSSI, because the tested nodes distances were rather small. In the following, the influence of distance on the RSSI is studied in three different environments:

- The 1st environment is the lobby of TUAS-building which is an open indoor environment. The measurements are gathered at intervals of 1 meter from 1 to 40 meters. After 10 meters the lobby narrows down in to a spacious corridor.
- The second habitat is the corridor of Control Engineering laboratory located on the 3rd floor of TUAS-building. The corridors size is 1.6·2.5 m and it is consider-ably smaller than the corridor of the lobby.
- The last environment is a parking lot, which replicates a free area where no obstacles or reflecting surfaces are present, in the close neighborhood of the test bed.

The sequential number of the packets and the corresponding RSSI measurements were stored in the external flash memory of the Micro.2420 platform for off-line analysis. The average RSSI measurements and the packet reception rate (PRR) were evaluated from a set of 150 measurements at each location.

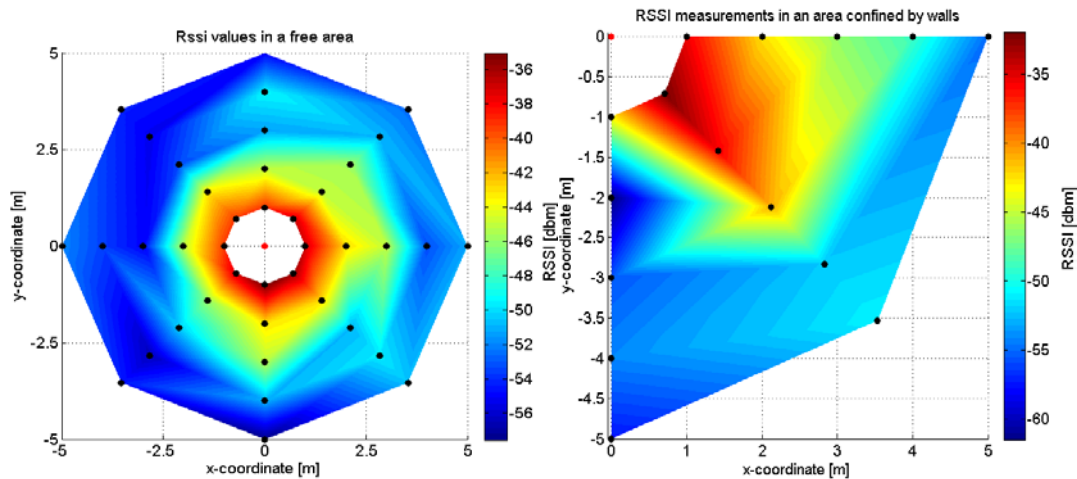
The RSSI behavior is non-consistent over small changes in the distance, but in general it decreases as a function of distance. The observed signal strength is higher at most distances in the corridor setup then in the lobby or parking lot. The corridor acts as a waveguide in which the radio signals bounce along the corridor walls. In the PRR remains high in all environments at most distances. However, in each studied environment, one or more drops of the PRR are observable also identified that PRR depends on the spatial position of the nodes.

The RSSI magnitude decreases considerably in the preceding measurement positions before an evident drop in the PRR occurs. For example, the decrease of the RSSI over a 5 meters distance is -25 dBm for the corridor and -15 dBm for the parking lot.



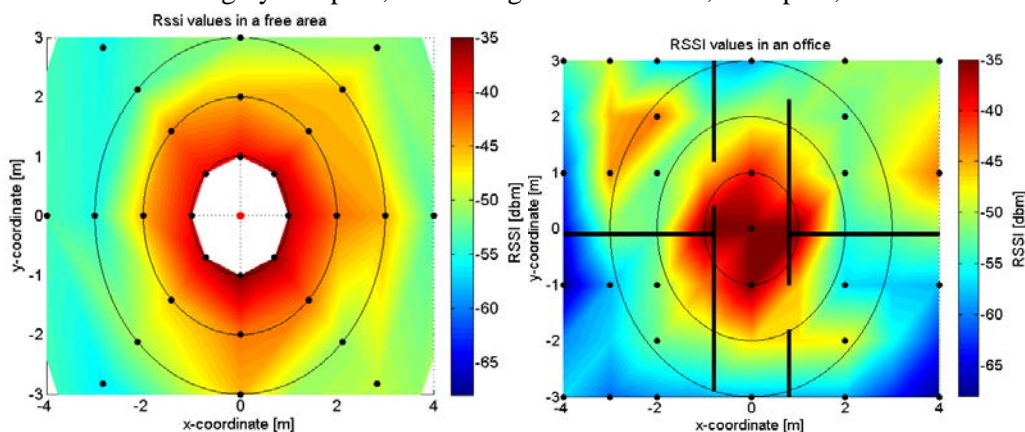
### 3.3.4 The effect of the surrounding environment

The radiation pattern of the antenna was examined by collecting RSSI measurements around a central node at intervals of 1 meter and  $45^\circ$ . The orientation of the central node was not changed during the measurements. The figure illustrates the radiation pattern of the antenna in a free environment (left side) and in an area confined by walls (right side). The central node is positioned to the origin in both experiments whereas the black dots represent the measurement positions. The radiation patterns are achieved by interpolating in between the collected measurements. In the obstacle free area, the radiation pattern is slightly asymmetrical due to the imperfect radiation pattern of the Omni directional antenna. This result implies that the node orientation has a great impact on the RSSI measurements. For example, at a distance of 3 meters from the central node, a difference of 10 dBm is measured between the highest and lowest RSSI value, confirming the results reported. In their tests, a maximum difference of 11 dBm was obtained in equivalent regions of the radiation pattern.



RSSI in a free area shown on the left and in a confined area shown on the right. RSSI values in the confined area are considerably weaker than in the free area. The irregular radiation pattern of the Omni directional antenna can be observed from the measurements conducted in the free area.

In the confined area, walls are located on the two axes spanning from the origin. The radiation pattern along the y-axes is considerably weaker compared to the free area; a maximum difference of 18 dBm is measured at position (0, -2). On the other hand, along the x-axes, and along the direction  $-45^\circ$ , the RSSI values are on the average higher in comparison to the free area. On average, the RSSI measurements are 0.8 dBm higher along the x-axis in the obstructed environment. Correspondingly in the direction of  $-45^\circ$  a difference of 3.6 dBm on average is recorded in favor of the corner. The radiation pattern is therefore examined in an office environment, where plaster walls, cabinets and other obstacles affect the propagation of radio signals. The positions of the nodes are shown in the below Figure, where also the walls are illustrated with thick black lines. It is clear that in an office environment, where LoS communications are rare, attenuation is much stronger and much more irregular than in free areas. The radio signal strength does not decrease solely as a function of distance and modeling the RSSI becomes highly complex, when irregular attenuation, multipath, etc. have to be considered.



Comparison of the RSSI in a free area on the left and in a confined office, where walls and other obstacles disturb the propagation of the radio signal. Radiation pattern in an office is highly irregular and attenuation of the radio signal is faster than in an open environment.

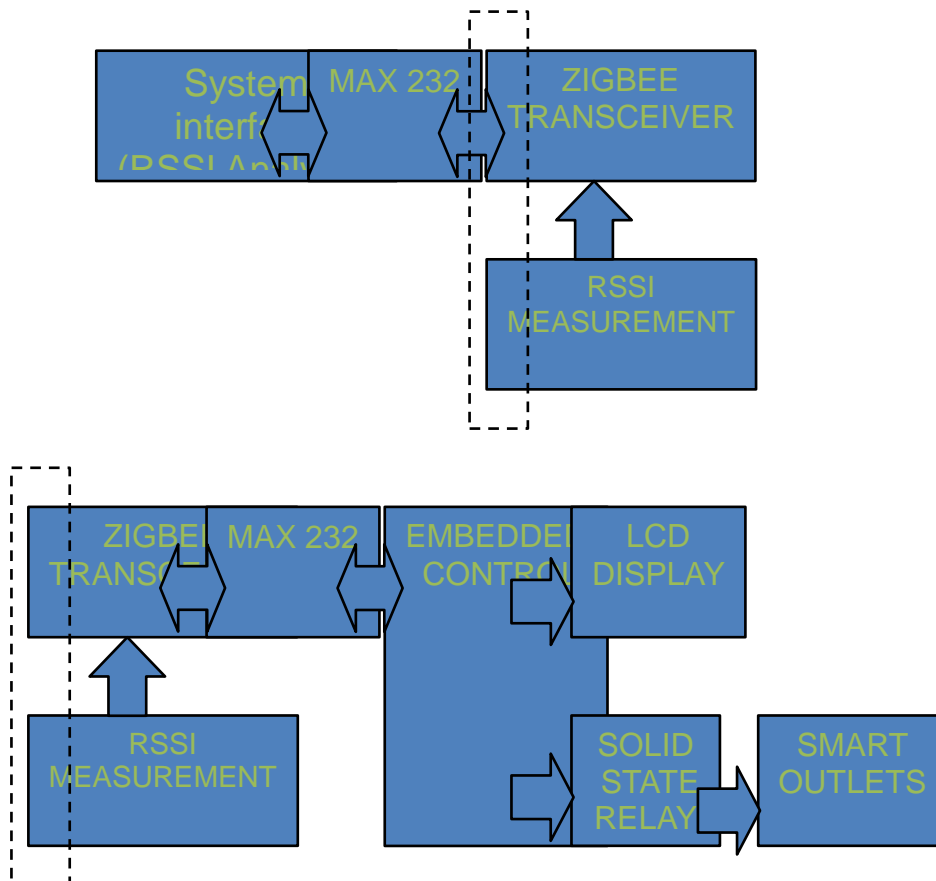
### 3.3.5 Sources of RSSI variability

The fact that the RSSI measure varies, denotes that the RSSI cannot be modeled accurately before-hand even though node locations would be known. The embedded algorithm and the intrusion detection system were developed to adjust to the variability of the RSSI measure and to react to the changes in the environment.

## 4. RSSI based intrusion detection

This measure has been found to be useful for these intentions since RSSI measurements are nearly constant in a static environment, but show increasing variance when the conditions change, the intrusion detection is performed in a distributed fashion, locally by each node, only by means of processing the RSSI measurements. The intrusions sensed by individual nodes are sent to the sink node. Situation awareness is obtained by aggregating the alerts of all nodes and tracking is performed in real-time on a computer connected to the sink node.





## 5. CONCLUSION

The impact of transmission power, nodes distance, and the surrounding environment on RSSI variability were studied in order to determine a framework for the RSSI characteristics. The nodes of the network exploit a high-accuracy TS protocol that enables the nodes to communicate in a TDMA fashion. The TDMA based communication schedule allows the nodes of the network to disable their radio when scheduled communications are not expected, thus leading to an increase in network lifetime. The timeline of the application was thoroughly investigated and the duration of the executed operations during the transmission and reception slots were presented. The results exposed the minimum length for the TDMA slot.

## REFERENCES

- V. Sundramoorthy, G. Cooper, N. Linge, and Q. Liu, "Domesticating Energy-Monitoring Systems: Challenges and Design Concerns", IEEE Pervasive Computing, vol. 10, no. 1, pp. 20–27, 2011.
- D. M. Han and J. H. Lim, "Design and implementation of smart home energy management systems based on zigbee," IEEE Transactions On Consumer Electronics, vol. 56, no. 3, pp. 1417 –1425, 2010.
- B. Mrazovac, M. Z. Bjelica, I. Papp and N. Teslic, "Towards ubiquitous smart outlets for safety and energetic efficiency of home electric appliances", Proc. of Intl. Conf. on Consumer Electronics (ICCE '11), Berlin (Germany), pp. 324-328, 2011.
- D. Puccinelli, A. Foerster, A. Puiatti and S. Giordano, "Radio-based trail usage monitoring with low-end motes", Proc. of the 7th IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing (PerSens '11), Seattle, (USA), pp. 196-201, 2011.
- O. Kaltiokallio, M. Bocca, and L. Eriksson, "Distributed RSSI processing for intrusion detection in indoor environments", Proc. of 9th ACM/IEEE Intl. Conf. on Information Processing in Sensor Networks (IPSN '10), pp.404-405, 2010.
- N. Patwari and J. Wilson, "RF Sensor Networks for Device-Free Localization: Measurements, Models, and Algorithms", in Proceedings of the IEEE, vol. 98, No. 11, Nov 2010, pp. 1961-1973, doi: 10.1109/JPROC.2010.2052010.

- 
- M. Srbinovska, C. Gavrovski, and V. Dimvec, “Localization Estimation System Using Measurement of RSSI Based on Zigbee Standard,” in Conference Proceedings of the 17th International Scientific and Applied Science Conference (Electronics 2008), Sep. 2008.
  - M. Sugano, T. Kawazoe, Y. Ohta, and M. Murata, “Indoor Localization System Using RSSI Measurement of Wireless Sensor Network Based on Zigbee Standard,” in Conference Proceedings of the 6th International Multi-Conference on Wireless and Optical Communications, Jul. 2006.
  - Faheem, R. Virrankoski, and M. Elmusrati, “Improving RSSI Based Distance Estimation for 802.15.4 Wireless Sensor Networks,” in Conference Proceedings of the 2010 IEEE International Conference on Wireless Technology and Systems (ICWIT 2010), Aug. 2010.
  - K. Benkic, M. Malajner, P. Planinsic, and Z. Cucej, “Using RSSI Value for Distance Estimation in Wireless Sensor Networks Based on ZigBee,” in Proceedings of the 15th International Conference on Systems, Signals and Image Processing 2008 (IWSSIP 2008), June 2008.

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## **EFFECTIVENESS OF E-RECRUITMENT: AN ANALYSIS OF THE MODERN HR MANAGERS' PERSPECTIVES**

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### **ABSTRACT**

*The importance of recruitment as the most critical step towards building of a strong and competent Human capital pool is being increasingly recognised by today's organisations. Technology has transformed the recruitment process and given the costs of traditional recruitment methods, it is hardly surprising that employers are embracing e-recruitment optimistically. The present study is an attempt to gain an insight into modern HR managers' perspective towards the enhancing prevalence and effectiveness of E-recruitment in their organizations. It is established that online recruitment does offer clear advantages over traditional recruitments methods. At the same time, however, one must be cognizant of the disadvantages inherent in E-recruitment methods if only to avoid the pitfalls that they might produce.*

*Key Words: E-recruitment, Technology, Perspective, Effectiveness*

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### **INTRODUCTION**

Recruitment is undeniably the first step towards a successful human resource management in an organization. An organization's ability to attract and retain employees is very crucial. Recruitment, which is the point of entry into an organization for employees, plays a critical role in enhancing organizational survival and success. Candidates, or future employees, are a veritable source of performance. The recruitment process has to be in harmony with a comprehensive approach to competence management: acquiring, promoting and regulating individual and collective skills. Today, competence management is considered to be strategic source of competitive advantage .It has to be realised that companies should not be seen merely in terms of their business portfolio, but should be understood as a unique set of tangible and intangible resources, a portfolio of core competencies and distinct resources. It has to be remembered that employees play the most crucial role in the success of organizations.

The nature of work in the modern times presents many challenges for recruitment: knowledge-based work places greater demands on employee competencies, demographic, societal, and cultural changes are widespread and are creating an increasing global shortfall in the number of qualified applicants and the workforce is also increasingly becoming diverse. Chambers et al. use the term "the war for talents" for this scenario. Recruitment, thus, can be called the first stage in a comprehensive approach to competence and talent management.

### **E- RECRUITMENT: THE CONCEPT**

With unemployment continuing it's unreasonable lows and at the same time the demand for good workers at an all time high, businesses are beginning to rely more on websites and technology to supplement the traditional recruitment methods. Technology has transformed the recruitment process, from use of the company website for advertising vacancies to electronic CV screening, short-listing and interviewing. Given the costs of traditional recruitment methods, it is hardly surprising that employers are embracing e-recruitment optimistically.

E-recruitment, also known as online recruitment, is the practice of using technology and in particular Web-based resources for tasks involved with finding, attracting, assessing, interviewing and hiring new personnel. The purpose of e-recruitment is to make the processes involved more efficient and effective, as well as less expensive. Online recruitment can reach a larger pool of potential employees and facilitate the selection process. Organizations are focusing on developing user friendly and well functional online portals focusing on developing a concrete online recruitment process which can provide concrete readymade profiles. The E-recruitment should be so well designed that it gives you a competent professional for the role which should emphasize on Online Testing focusing on Skills tests, Competency tests, Experience recommendation, Psychometric tests and then lastly submitting the candidature. Once the profile is submitted the system would be able to generate required competent professional data for which HR team of an organization can conduct telephonic / online Interviews to check the capability of the person and finally organize face to face interviews with the stakeholders to take a final decision.

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### **ADVANTAGES AND LIMITATIONS INVOLVED**

Because the growth of e-recruitment technologies has made applying for jobs simpler and more streamlined, applications are on the rise both from strong candidates and from those lesser qualified. Recruiters are relying increasingly on e-recruiting technology to help narrow down the field, underscoring the importance of job-matching technology and of finding ways to use the Internet to better connect with the most promising candidates. Surveys have indicated that Advancements in recruitment technologies, combined with the growing importance of niche job boards and social networking sites, are helping to make the process of applying for jobs simpler and more efficient.

Companies are expanding their use of the Internet as a recruitment tool to attract competent people and to obtain the much needed competitive advantage. Internet is bringing radical changes to corporate recruiting with numerous benefits—faster and easy reach to job seekers, large pool of qualified candidates for every level, substantial cost savings and shortened hiring cycles. It would be right to say that that online recruitment benefits both the organizations and the job seekers.

Much of the evidence supporting the use of e-recruitment focuses on time and cost savings. The speed with which several steps of the recruitment process can be carried out online leads to a much shorter recruitment cycle. Applications can be processed and delivered within minutes rather than weeks, saving both the organization's and the job seeker's valuable time. Additionally, organizations can save considerable amounts of money when recruiting online.

Advertising open positions on the Internet also optimises the recruitment of local, national, and international job candidates. Furthermore, the integration of an e-recruitment systems and agencies' human resource information systems (HRIS) can enable the recruiters to access several databases in the core HRIS, extract data on the previous hirings and the workforce, and import data on the new ones. Such integration is also useful for recruiters and line managers who have to think strategically while they are doing workforce planning, assessments, and diversity management.

Talking about the limitations it can be said that the major issues and challenges with e-recruitment have centred on the quantity and quality of candidates received using Web-based tools, the lack of knowledge of e-recruitment techniques within the HR community, and a limited commitment to e-recruitment by senior management. Furthermore, recruiting through the Internet has raised concerns among potential applicants about keeping their personal information secure and confidential. The fact remains that the candidates profile and company details are easily available to public. In most of the cases, the applicants do not want their employer to know that they are looking for a change. Moreover disclosure of phone numbers, address information etc. can lead to many security problems. Again some companies also might not want their competitors always to know the current scenario of their employee requirements.

### **ABOUT THE STUDY AND RESEARCH METHODOLOGY**

The major objective of this study was to get a critical insight into the modern day HR managers' perception about the effectiveness of e-recruitment in today's times. This was primarily a **Qualitative Study** where primary data was collected with the help of structured questionnaires and direct interactions with 40 Human Resources Professionals from 5 Placement consultancies in Delhi and an attempt was made to analyze their perspectives about e-recruitment. A Placement Consultancy or a Recruitment firm acts as a link between the companies that offer jobs in various arenas and the job-seekers. They also help reduce the clutter and streamline the manpower hunting for the companies no matter how big or small. They act as a guide to the job-seekers to guide them with their career prospects. HR managers working with such consultancies have a fair idea about the latest trends in Human Resource Management and their effectiveness.

Convenience Sampling was used for the study which is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher.

The survey was conducted through a structured questionnaire administered to respondents covering the vital aspects of e-recruitment. The questionnaire consisted of both closed and open ended questions. Likert five point scale was used to allow the individuals to express how much they agree or disagree with a particular statement. The responses were recorded and supplemented with direct interactions with a few respondents. However, a small sample size, non-probability sampling technique and human errors might have proved to be some limitations associated with this study.

### **DATA ANALYSIS AND INTERPRETATION**

The data collected from the respondents was tabulated and analysed. The responses to the close- ended questions were as follows (responses in percentages):



Sr. No	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Our Organization believes that Traditional recruitment methods are enough in modern times.	4	20	15	39	22
2	In our organisation, E- Recruitment has been more effective when compared with Traditional recruitment methods.	42	48	10	0	0
3	Simplicity and reachability of e-recruitment process attracts more candidates.	36	58	3	3	0
4	E-recruitment process attracts both active and passive job seekers.	16	68	13	3	0
5	In my organisation, E-Recruitment has been saving on time.	18	53	11	18	0
6	E recruitment has given us a substantial cost advantage.	22	41	16	11	10
7	Our organisation is satisfied with E-Recruitment as a means of getting the right talent pool.	29	58	10	3	0
8	It has been observed that E-Recruitment through online communities is very helpful for prospective candidates.	23	61	10	6	0

*Table depicting the responses to the close-ended questions*

The overall results of the study clearly showed that HR managers in majority of Organizations have a positive perception of E-recruitment as an effective way of getting the right talent pool in modern times. The increased influence of web-based networking sites as part of the recruitment process is prompting more job seekers and employers to conclude that they need to establish and manage their own online presence in the world of Webualified job seekers. A majority of respondents felt that traditional recruitment methods are no longer enough and need to be replaced or supplemented by the new age methods.

The respondents also focused on the fact that e-recruitment methods are providing substantial time and cost advantages to the organizations and are optimising the Human resource management of a Company. Furthermore, Internet recruitment was linked positively to corporate image, reducing recruitment costs, reducing administrative burden and employing better tools for the recruitment team. Respondents also felt that recruitment should be strategically viewed in terms of corporate vision and Proper training should be provided to the managers to conduct it optimally. Managers further believed that E-recruitment can also be promoted in Social Networking sites by highlighting the roles/positions organization is looking for. This would greatly help in reaching potential candidates having the required skills set. If organizations seriously work on the hiring though the e-recruitment process, they would reap a better workforce and will help in streamlining the function to a large extent.

Thus the major advantages associated with e-recruitment emerged as:

- E- recruitment is comparatively more cost effective.
- E- recruitment is quick and saves on precious time of the HR department of the organization.
- Online recruitment gives the organizations a better chance of Image building and success.
- Online recruitment gives organizations a bigger audience and a better talent pool.
- Online recruitment is easy and straightforward if carried out in a well planned manner.

However, Certain limitations which were being faced by the organizations were:

- Too many candidates: Dealing with inappropriate, irrelevant and bad candidates was sometimes a problem faced by HR managers.
- It might not always work as not every job vacancy that is posted, can or will be filled online.

c) There might be certain privacy issues involved on both the company's as well as the applicants' sides.

## CONCLUSION

Thus, to conclude it can be said that the emphasis on organizational performance and individual productivity has made effective recruitment and hiring major concerns for the modern HR managers. Specifically, reforming recruitment and hiring processes while operating within budgetary constraints has been an urgent agenda item for most organizations. Most recruitment experts agree that the ideal design is a combination of electronic and face-to-face methods. Recruitment solutions are context driven, so organizations need to choose the right combination for the role they want to fill.

It cannot be denied though, that there has been an increase in e-recruitment, with a majority of firms using or moving towards this method. It has to be realised that jobseekers are migrating online, so it's crucial for the employers to recognise this trend. Online recruitment does offer clear advantages over traditional recruitments methods. At the same time, however, one must be cognizant of the disadvantages inherent in E- recruitment methods if only to avoid the pitfalls that they may produce for the organisations.

## BIBLIOGRAPHY

1. Bourdieu, P. (1986): The forms of capital. In: Handbook of theory and research for the sociology of education. J. G. Richardson (éd.), New York, Greenwood: 241-258.
2. Breaugh, J. A., and Starke, M. (2000). Research on Employee Recruitment: So Many Studies, So Many Remaining Questions. *Journal of Management*, 26, 405-434.
3. Burt R. (1992). *Structural Holes, The Social Structure of Competition*. Harvard University Press.
4. Cappelli P (2001), "Making the Most of Online Recruiting", *Harward Business Review*, Vol. 79, No. 3, pp. 139-146.
5. Chambers, E. G., Foulton, M., Handfield-Jones, H., Hankin, S. M., and Michaels III, E. G. (1998). The War for Talent. *The McKinsey Quarterly*, 44-57
6. Chapman, D. and Webster, J. (2003), "The Use of Technologies in Recruiting, Screening, and Selection Processes for Candidates", *International Journal of Selection and Assessment*, Vol. 11, No. 2/3, Pp. 113-20.
7. Keim T and Weitzel T (2006) "Strategies for Hiring IT Professionals: An Empirical Analysis of Employer and Job Seeker Behavior on the IT Labor Market", *Proceedings of the Twelfth Americas Conference on Information Systems*, Acapulco, Mexico, August, pp. 3649-3659.
8. Raman, S.R., Budhwar, P., & Balasubramanian, G. (2007), "People management issues in Indian KPOs", *Employee Relations*, 29(6), 696-710.
9. Singh Nirvikar (2001), "Skills Online", available at <http://people.ucsc.edu/~boxjenk/bookchapters/Bkch21.pdf>, last accessed on Dec 23, 2012.

## WEB LINKS (accessed between November 2013 to March 2014):

- <http://www.minfosystems.com/erecruitment-solution-india/recruitment-software-india.htm>
- <http://blogs.placementindia.com/2011/06/03/role-of-placement-consultants-in-the-job-recruitment-industry/>
- <http://www.peoplesmatters.in/article/2014/01/11/talent-acquisition/e-recruitment-a-futuristic-cost-reduction-process/4355>
- [http://www.nytimes.com/2013/05/16/business/smallbusiness/online-recruiting-efforts-gain-ground.html?\\_r=0](http://www.nytimes.com/2013/05/16/business/smallbusiness/online-recruiting-efforts-gain-ground.html?_r=0)

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**INVESTMENT PATTERN AND THE FACTORS INFLUENCING THE INVESTMENT  
PREFERENCE AMONG DIFFERENT AGE GROUPS**

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**ABSTRACT**

*Age is an important factor for Investment, since it is closely associated with life stage and it determines the investment objective to be met within a definite tenure. Based on the investment objective and tenure appropriate investment avenue is selected. Risk tolerance level is very closely associated with age and the investment pattern differs accordingly. Investors today are more educated and have wide knowledge of investment and have easy access to financial information. There are various determinants influencing the investment pattern of an individual, but this study aims to determine whether the Investment preference and Decision making is affected by age factor. It also finds out the similarities and dissimilarities between different age groups with regard to investment pattern and to determine which factor influences their investment decision making process.*

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**INTRODUCTION**

The research on investment behaviour will lead to find out more specifically about the factors influencing the investment patterns and beliefs. One such factor considered for the study is age and its impact on investment preferences; thereby reach the goal of this research. Generally, the investment behaviour is study which finds out what triggers people to invest, what their general beliefs on investing are, where they get their information from, how they value different information sources and what influences their decisions. The research seeks information to find out specifically what investments any respondent has or has had, but how he or she acts, acted or would act in investment process.

Individual Investment decision and selection of Investment avenue can be influenced by so many factors like Age, Gender, Education, Marital status, Occupation, Religion, Mother tongue, Life stage, Family type, Work Experience, Income, Annual Savings, Net worth, Number of earning members, Financial dependents, Financial literacy, reference group, Family members, Learning, Memory, Perception, Attitude, Risk profile, Income-expenditure ratio, Borrowing habit, Perception on loan, Current financial stability, Risk- return associated to Investment avenue, Investment motive, Investment tenure, Preference towards Investment avenue etc.

The age factor is very important amongst all others owing the fact that the risk appetite and the priorities in life would vary with the life stage. Twenty-five years is considered to be an ideal age to start saving and managing own's investments, where one can ideally invest 90 per cent in equity and 10 per cent in debt. Since the risk appetite is higher in youngster, investment in equity would be fine. ELSS (equity linked savings schemes) and a pension fund are also two good investment options. Include life insurance and health policy in your portfolio for protection and tax deduction benefits. A small portion of investment can be done in fixed deposits too. The main investment objective would be to clear off the one's own educational loan purchase of car, house, start off a business, marriage expense, etc. Its an ideal time to go systematic investment plan(SIP) of mutual fund, recurring deposit.

At 35 your priorities are different. Child's education expense would be the priority and to take care of home/mortgage loan. Planning for tax could be another priority. The risk tolerance level would shift from high risk tolerance to average risk. Besides this, home loan and insurance are a must as they get you a tax deduction. At this age, one should be putting 75 per cent money in equity and 25 per cent in debt. Also start planning for retirement at this age and include a pension plan in the investment portfolio. 35 is also the right age for investment in ELSS. Insurance risk cover is felt to cover the liability burden like mortgage loan, education loan,

etc. The influence of age factor also creates the need for insurance cover if the individual could be the single bread winner for the family.

At 45 years of age, it is necessary to maintain the equity-debt ratio at 75:25. It is also time to invest in the child's higher education and Child wedding. The risk tolerance level would shift to below average depending on the individual's economic and financial status. Investment shifts to debt funds, deposits, PPF (Public Provident Fund) and equity fund. Five-year fixed deposits should also be ideal to add on to the portfolio. The need for family health policy would be felt.

A 55-year-old should invest in debt and equity in equal proportion. Also investment in NSC (National Savings Certificate) would be ideal, so that the cash flow is maintained after retirement. The plan for retirement would begin. The best strategy is to begin the investments at the start of the year and continue it throughout the year. The major expense would be towards health.

Thus, investment pattern would change based on the age factor. The study is done to understand the investment behaviour of respondents of different age group and to analyse the factors affecting their investment decisions.

### BACKGROUND AND NEED FOR THE STUDY

It is evident that the projected household savings rate increases from 23.2 per cent in 2011-12 to 25.2 per cent in 2016-17, giving an average of 24.4 per cent during the Twelfth Plan.

Table 1: Projections of Household savings Rate (in per cent of GDP)							
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	12th Plan Average
Household savings rate	23.2	23.6	24.0	24.4	24.8	25.2	24.4

Source: RBI

The Working Group considered the impact of demographic factors on household savings. One approach was to assess the possible effect of the differential savings propensity across the age-profile of the chief earner of the household. In this context, an NCAER-Max New York Life Study (2007) [henceforth, the NCAER Survey (2007)] provided some insights. The Study showed, on the basis of a survey conducted in 2005 that the average savings per household in India increased with the age of its chief earner, till the latter attained the age of 65 years (Table A). This increase in savings was attributed to the growing need for old-age financial security, apart from the general increase in savings with (working) age.

Table A: Average Annual Saving per Household	
Age of Chief Earner of Household (in years)	Average Annual Savings per Household (in Rupees)
Less than 25	8,515
26-35	13,465
36-45	15,522
46-55	20,444
56-65	21,196
More than 65	17,011
Average	16,139 <sup>5</sup>
Source: Max Life New York - NCAER Survey (2007)	

Table B: Projected Age-structure of Population in India							
Age-Group (in years)	Percentage of population in that age-group						Variation of 2016 over 2011 (percentage points)
	2011	2012	2013	2014	2015	2016	
Less than 25	48.9	48.9	48.4	47.9	47.4	46.9	-2.1
25-34	16.2	16.2	16.3	16.3	16.4	16.4	+0.2

35-44	12.8	12.8	12.9	13.0	13.1	13.2	+0.4
45-54	9.8	9.8	9.9	10.0	10.1	10.2	+0.4
55-64	6.6	6.6	6.8	6.9	7.1	7.2	+0.6
Above 64	5.7	5.7	5.8	5.9	6.0	6.1	+0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	
Source: UNSTAT							

The results of the NCAER Survey imply that if the composition of the Indian population shifts in favour of higher (working) age groups, household savings would increase. The projected age-structure of India's population over the Twelfth Plan period, as given by the United Nations database, is set out in Table B.

It may be observed that the age-groupings in the UN database are almost identical to that of the NCAER Survey. Furthermore, over the period 2011-2016, the share of population in the 'less than 25 years' age group is estimated to decline by 2.1 percentage points, while it would increase in the case of each of the other age groups. The maximum increase of 0.6 percentage points occurs in the case of the age-group 55-64 years, which coincides with the age group of the chief earner of the households whose average savings was found to be the highest in the NCAER Survey. Thus, the impact of the projected age structure of the Indian population over the Twelfth Plan is expected to be positive on overall household savings.

## 2. OBJECTIVES OF THE STUDY

- To determine the association between Investment objective and age group.
- To determine the Individual risk tolerance level towards Investment among the different age group respondents
- To determine the source of financial information about different Investment Avenue among different age group respondents
- To analyse the most preferred Investment Avenue among the various age group
- To analyse their Investment pattern of the respondents of the different age group

## 3. LIMITATIONS OF THE STUDY

- 1) Sample size of the study is 405 salaried educated investors in Coimbatore city. The sample size may not adequately represent the national market.
- 2) This study has not been conducted for a longer time horizon covering market ups and downs. The state of market has a significant influence on the buying patterns and preferences of investors. The study was conducted during a particular period of time and hence it will not be applicable for all periods.
- 3) The study being based on a survey of investors, it includes all limitations inherent in the questionnaire form of research.

## 4. RESEARCH METHODOLOGY

A sample design is a definite plan for obtaining a sample from a given population. Population of the study is the employees who work in a Bank, an NBFC, Insurance, Mutual Fund, Educational Institutions and an IT/IT enabled Services Company. In this study multi stage random sampling method, for which 405 samples were considered. It is a Proportionate stratified random sampling method, as the researcher decides the selection and inclusion of samples based on various parameters like economic status, ease of access, geography, occupation, income level etc. The risk profile of the respondents is studied using Investment risk tolerance 13 point scale questionnaire developed by Grable, J. E., & Lytton, R. H. (1999). Financial risk tolerance revisited: The development of a risk assessment instrument. Financial Services Review, 8, 163-181.

## 5. ANALYSIS AND INTERPRETATION

Table No: 1 Profile of respondents based on the gender classification

N : 405

Particulars		Age Group									
		$\leq 25$		26 - 30		31 - 35		> 35		Total	
		No	%	No	%	No	%	No	%	No	%
Gender	Female	81	66%	46	34%	23	35%	19	24%	169	42%
	Male	42	34%	91	66%	42	65%	61	76%	236	58%
	Total	123	100%	137	100%	65	100%	80	100%	405	100%
Educational Qualification	High School			1	1%					1	0%
	Diploma	2	2%	3	2%	2	3%	2	3%	9	2%
	Bachelor Degree	49	40%	38	28%	18	28%	23	29%	128	32%
	Master Degree	49	40%	69	50%	30	46%	29	36%	177	44%
	Professional	22	18%	25	18%	14	22%	25	31%	86	21%
	Others	1	1%	1	1%	1	2%	1	1%	4	1%
	Total	123	100%	137	100%	65	100%	80	100%	405	100%
Religion	Hindu	101	82%	118	86%	57	88%	75	94%	351	87%
	Christian	14	11%	13	9%	7	11%	3	4%	37	9%
	Muslim	7	6%	5	4%	1	2%	2	3%	15	4%
	Others	1	1%	1	1%		0%		0%	2	0%
	Total	123	100%	137	100%	65	100%	80	100%	405	100%
Mother tongue	Tamil	92	75%	94	69%	39	60%	55	69%	280	69%
	Telugu	17	14%	18	13%	9	14%	3	4%	47	12%
	Malayalam	8	7%	15	11%	11	17%	12	15%	46	11%
	Kannada	3	2%	5	4%	3	5%	6	8%	17	4%
	Others	1	1%	4	3%	2	3%	4	5%	11	3%
	Hindi	2	2%	1	1%	1	2%		0%	4	1%
	Total	123	100%	137	100%	65	100%	80	100%	405	100%

Source: Primary

The table no:1, shows the profile of respondents categorized under four age group like lesser than and equal to 25 years, between 26 to 30, between 31 to 35 and greater than 35 years. It is inferred from the above table that 66% of respondents who are lesser than 25 years of age are female, whereas in all other age group categories, male respondents form the majority when compared to female respondents. It is inferred that in all age group categories, the education qualification is master degree forms the majority. Among the religion, majority almost 87% of the respondents of all age group are Hindus. 69% of overall respondents' mother tongue is Tamil.

**Null Hypothesis: There is no significant association between age and Investment motive**

Table No: 2 Relationships between age and Investment motive using Friedman Test

Investment motive		Age group			
		≤ 25	26 - 30	31 - 35	> 35
Wealth Maximisation	Mean	3.41	3.68	4.04	4.42
	Rank	1	1	2	2
Child future	Mean	4.15	3.68	2.51	3.45
	Rank	3	2	1	1
Retirement planning	Mean	3.77	4.55	4.1	4.76
	Rank	2	3	3	3
Tax planning	Mean	5.57	4.89	5.26	6.46
	Rank	4	4	4	6
Secure one's own future	Mean	6.9	6.57	6.57	5.7
	Rank	8	5	5	4
Contingency management	Mean	6.7	6.79	6.65	6.92
	Rank	6	6	6	10
Protect from liability	Mean	6.74	7.08	7.17	6.28
	Rank	7	9	8	5
Pass on wealth to next generation	Mean	6.47	6.81	7.34	6.74
	Rank	5	7	9	9
Protect one's health	Mean	6.91	6.88	7.04	6.57
	Rank	9	8	7	7
Social well being	Mean	7.48	7.29	7.5	6.61
	Rank	10	10	10	8
Inflation management	Mean	7.91	7.79	7.94	8.11
	Rank	11	11	11	11
Others	Mean	11.98	11.98	11.88	11.99
	Rank	12	12	12	12
Chi-Square		538.287	582.066	314.205	309.806
Asymp. Sig.		0.00	0.00	0.00	0.00

From the table no: 2, we infer that p value is 0.00 which is lesser than 0.05 (5% level of significance) hence the null hypothesis is rejected. Therefore we conclude that there is significant relationship between age group and investment motive. Among the age group ≤ 25 and 26-30, wealth maximization is given the first rank, while respondents of age group 31-35 and >35 have ranked child future as their primary investment motive. Retirement plan is the third investment motive among 26-30, 31-35 and >35 age group respondents. Social well being and managing inflation are the least investment motive among all age group respondents.

**Null Hypothesis: There is no significant association between age and risk profile of Individuals.**

Table No: 3 Relationship between age and Risk Profile using Chi Square test

Risk Profile	Age group				Total
	≤ 25	26 - 30	31 - 35	> 35	
High tolerance	20(16%)	24(18%)	9(14%)	8(10%)	61(15%)
Above average	38(31%)	45(33%)	21(32%)	23(29%)	127(31%)
Average	55(45%)	58(42%)	29(45%)	42(53%)	184(45%)
Below average	10(8%)	9(7%)	6(9%)	6(8%)	31(8%)
Low tolerance		1(1%)		1(1%)	2(0%)
<b>Grand Total</b>	<b>123(100%)</b>	<b>137(100%)</b>	<b>65(100%)</b>	<b>80(100%)</b>	<b>405(100%)</b>

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.050 <sup>a</sup>	12	0.914
Likelihood Ratio	6.801	12	0.870
Linear-by-Linear Association	2.041	1	0.153
N of Valid Cases	405		

a. 5 cells (25.0%) have expected count less than 5. The minimum expected count is 0.32.

From the table no: 3, we infer that p value is 0.914 which is greater than 0.05 (5% level of significance) hence the null hypothesis is accepted. Therefore we conclude that there is no significant relationship between age group and their risk profile. It is inferred from the above table that respondents of age group ≤ 25 years(16%) fall under high risk profile category and (53%)>35 years age group fall under average risk profile category. The general consensus suggests that older individuals are less risk tolerant than others (Coleman, 2003; Halek & Eisenhauer, 2001). While this may or may not be true – and as a result, worthy of additional research – a more intriguing question is the one that asks if people tend to over- or under-estimate their risk tolerance as they age.

**Null Hypothesis: There is no significant association between age and Annual Individual Income**

Table No: 4 Relationship between age and Annual Individual Income using Chi Square test

Age Group		Annual Individual Income (Rs)							Total
		0 - 100000	100001 - 200000	200001 - 300000	300001 - 400000	400001 - 500000	500001 - 600000	> 600000	
≤ 25	No	27	42	28	17	6	2	1	123
	%	22.0%	34.1%	22.8%	13.8%	4.9%	1.6%	0.8%	100%
26 - 30	No	10	55	31	14	12	7	8	137
	%	7.3%	40.1%	22.6%	10.2%	8.8%	5.1%	5.8%	100%
31 - 35	No	4	13	14	8	11	5	10	65
	%	6.2%	20.0%	21.5%	12.3%	16.9%	7.7%	15.4%	100%
> 35	No	1	11	19	13	10	7	19	80
	%	1.3%	13.8%	23.8%	16.3%	12.5%	8.8%	23.8%	100%
Total	No	42	121	92	52	39	21	38	405
	%	10.4%	29.9%	22.7%	12.8%	9.6%	5.2%	9.4%	100%



Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	85.577 <sup>a</sup>	18	0.000
Likelihood Ratio	89.228	18	0.000
Linear-by-Linear Association	68.750	1	0.000
N of Valid Cases	405		
a. 2 cells (7.1%) have expected count less than 5. The minimum expected count is 3.37.			

From the table no: 4, we infer that p value is 0.000 is lesser than the 0.05 (5% level of significance) hence the null is rejected. Therefore there is significant relationship between age group and Individual Annual Income group. It is shows that 34.1% of respondents whose age is lesser than 25 group and 40% of 26-30 age group fall under Rs 1.00 to 2.00 Lakhs annual individual income category. 21.5% of 31-35 age group respondents earn Rs 2.00 to 3.00 Lakhs per annum. Whereas 23.8% of 35 years and above age group earn greater than Rs 6.00 Lakhs per annum. It is clear that as age increases individual annual income increases.

**Null Hypothesis: There is no significant association between age and Income Expense Ratio**

Table No: 5 Relationship between age and Income Expense Ratio using Chi Square test

Age Group		Income Expense Ratio			Total
		Income greater than expense	Income equal to expense	Expense is greater than income	
≤ 25	No	37	46	26	109
	%	33.9%	42.2%	23.9%	100%
26 - 30	No	45	65	22	132
	%	34.1%	49.2%	16.7%	100%
31 - 35	No	28	24	10	62
	%	45.2%	38.7%	16.1%	100%
> 35	No	40	32	5	77
	%	51.9%	41.6%	6.5%	100%
Total	No	150	167	63	380
	%	39.5%	43.9%	16.6%	100%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.972 <sup>a</sup>	6	0.020
Likelihood Ratio	15.764	6	0.015
Linear-by-Linear Association	12.054	1	0.001
N of Valid Cases	380		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.28.			

From the table no: 5, we infer that p value is 0.020 is lesser than the 0.05 (5% level of significance) hence the null is rejected. Therefore there is significant relationship between age group and Income-expense ratio of an Individual. It is inferred that 42.2% of respondents whose age is lesser than 25 years and 49.20% of 26-30 age group have stated that their income is equal to expenses, whereas 45% of the respondents whose age is between 31 and 35 years and 51.9% of respondents older than 35 years claim that their income is greater than expenses. Hence we can conclude that youngsters spend more hence their income is not adequate enough to meet their expenses thereby shall also reflect their savings and investment pattern too.

#### Null Hypothesis: There is no significant association between age and Financial Dependency

Table No: 6 Relationship between Age and Financial Dependency using Chi Square test

Age group		Financial Dependency				Total
		Nil	Low	Medium	High	
≤ 25	No	33	4	11	75	123
	%	26.8%	3.3%	8.9%	61.0%	100%
26 - 30	No	28	14	9	86	137
	%	20.4%	10.2%	6.6%	62.8%	100%
31 - 35	No	8	13	5	39	65
	%	12.3%	20.0%	7.7%	60.0%	100%
> 35	No	9	11	18	42	80
	%	11.3%	13.8%	22.5%	52.5%	100%
Total	No	78	42	43	242	405
	%	19.3%	10.4%	10.6%	59.8%	100%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	35.307 <sup>a</sup>	9	0.000
Likelihood Ratio	34.327	9	0.000
Linear-by-Linear Association	0.562	1	0.453
N of Valid Cases	405		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.74.			

From the table no: 6, we infer that p value is 0.000 is lesser than the 0.05 (5% level of significance) hence the null is rejected. Therefore there is significant relationship between age group and financial dependency. 26.8% of respondents whose age is lesser than 25 years and 20.4% of 26-30 age groups have mentioned that they are financial independent.

#### Null Hypothesis: There is no significant association between age and Household investment decision-maker

Table No: 7 Relationship between Age and Household investment decision-maker using Chi Square test

Age Group		Household investment decision-maker						Total
		Self	Spouse	Siblings	Children	Parents	In-Laws	
≤ 25	No	36	18	7	4	58	0	123
	%	29.3%	14.6%	5.7%	3.3%	47.2%	0.0%	100%
26 - 30	No	62	25	2	1	45	2	137

	%	45.3%	18.2%	1.5%	0.7%	32.8%	1.5%	100%
31 - 35	No	32	19	3	2	9	0	65
	%	49.2%	29.2%	4.6%	3.1%	13.8%	0.0%	100%
> 35	No	48	21	2	2	6	1	80
	%	60.0%	26.3%	2.5%	2.5%	7.5%	1.3%	100%
Total	No	178	83	14	9	118	3	405
	%	44.0%	20.5%	3.5%	2.2%	29.1%	0.7%	100%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	58.373 <sup>a</sup>	15	0.000
Likelihood Ratio	64.749	15	0.000
Linear-by-Linear Association	41.739	1	0.000
N of Valid Cases	405		

a. 12 cells (50.0%) have expected count less than 5. The minimum expected count is .48.

From the Table No: 6, the p value is 0.000 is lesser than the 0.05 (5% level of significance) hence the null is rejected. Therefore there is significant relationship between age and Household investment decision-maker. It shows that 47.2% of respondents whose age is lesser than 25 group state that their parents take all investment related decisions. 45.3% of respondents of 26-30 age group and 60% of the respondents of 35 years state they make self decision on Investment. 29.2% of 31-35 age group respondents state their spouse make Investment decisions.

**Null Hypothesis: There is no significant association between age and Most preferred Investment Avenue**

Table 7: Most preferred Investment Avenue among the different age groups using Friedman Test N:405

Most Preferred Investment Avenue		Age group			
		≤ 25	26 - 30	31 - 35	> 35
Deposit	Mean	2.52	2.78	2.71	2.80
	Rank	1	1	1	1
Gold	Mean	2.64	2.84	2.98	3.30
	Rank	2	3	3	4
Property	Mean	2.92	2.79	2.89	2.69
	Rank	3	2	2	2
Insurance	Mean	3.59	3.32	3.28	3.14
	Rank	4	4	4	3
Shares / MF	Mean	4.14	4.44	4.31	4.13
	Rank	5	5	5	5
PF/PPF/ NSC	Mean	5.21	5.03	5.00	5.18
	Rank	6	6	6	6
Others	Mean	6.98	6.80	6.83	6.78
	Rank	7	7	7	7
Chi-Square		414.021	407.162	188.855	231.316
Asymp. Sig.		0.000	0.000	0.000	0.000

Source: Primary Data

**INTERPRETATION**

From the table no: 7, we infer that p value is 0.000 which is lesser than 0.05 (5% level of significance), hence the null hypothesis is rejected. Therefore we conclude that there is significant association between age group and their most preferred investment avenue. The respondents of all age group have ranked deposit as first and it's their most preferred investment avenue. Gold is second ranked investment avenue among the age group other than  $\leq 25$  years age group.

**Null Hypothesis: There is no significant association between age and Number of avenues invested**

Table No: 8 Relationships between Age and Number of avenues invested using Chi Square test

Age group		No of invested avenues								Total
		0	1	2	3	4	5	6	7	
$\leq 25$	No	30	27	27	16	16	4	3	0	123
	%	24.4%	22.0%	22.0%	13.0%	13.0%	3.3%	2.4%	0.0%	100%
26 - 30	No	9	23	26	31	23	15	8	1	136
	%	6.6%	16.9%	19.1%	22.8%	16.9%	11.0%	5.9%	0.7%	100%
31 - 35	No	1	12	5	11	16	9	10	1	65
	%	1.5%	18.5%	7.7%	16.9%	24.6%	13.8%	15.4%	1.5%	100%
> 35	No	2	6	5	14	15	10	23	5	80
	%	2.5%	7.5%	6.3%	17.5%	18.8%	12.5%	28.8%	6.3%	100%
Total	No	42	68	63	72	70	38	44	7	404
	%	10.4%	16.8%	15.6%	17.8%	17.3%	9.4%	10.9%	1.7%	100%

Source: Primary Data

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	114.886 <sup>a</sup>	21	0.000
Likelihood Ratio	112.818	21	0.000
Linear-by-Linear Association	84.028	1	0.000
N of Valid Cases	404		
a. 4 cells (12.5%) have expected count less than 5. The minimum expected count is 1.13.			

From the Table No: 8, the p value is 0.000 is lesser than the 0.05 (5% level of significance) hence the null is rejected. Therefore there is significant relationship between age and Number of avenues invested. It is shows that 22% of respondents whose age is  $\leq 25$  years state that they have invested in one avenue. 22.8% of respondents of 26-30 age groups have invested in three avenues. 24.6% of the respondents of age group 31 - 35 years have invested in four avenues. 28.8% of greater than 35 age group respondents' state they have invested in six investment avenues. Hence we can conclude that as age increase the diversification of investment is prominent.

Table No: 9 Investment pattern in various Investment avenues by different age group respondents N: 405

Age group		Investment pattern in various Investment avenues							Total
		Deposits	Gold	Property	Insurance	MF /Shares	PF/ PPF	Others	
$\leq 25$	No	55	46	31	40	19	37	3	231

	%	24%	20%	13%	17%	8%	16%	1%	100%
<b>26 - 30</b>	<b>No</b>	79	68	55	82	39	61	10	<b>394</b>
	<b>%</b>	20%	17%	14%	21%	10%	15%	3%	<b>100%</b>
<b>31 - 35</b>	<b>No</b>	44	36	32	48	31	36	4	<b>231</b>
	<b>%</b>	19%	16%	14%	21%	13%	16%	2%	<b>100%</b>
<b>&gt; 35</b>	<b>No</b>	60	57	52	66	40	58	8	<b>341</b>
	<b>%</b>	18%	17%	15%	19%	12%	17%	2%	<b>100%</b>
<b>Total</b>	<b>No</b>	<b>238</b>	<b>207</b>	<b>170</b>	<b>236</b>	<b>129</b>	<b>192</b>	<b>25</b>	<b>1197</b>
	<b>%</b>	<b>20%</b>	<b>17%</b>	<b>14%</b>	<b>20%</b>	<b>11%</b>	<b>16%</b>	<b>2%</b>	<b>100%</b>

Source: Primary Data

It is inferred from the table no: 9 that 24% of respondents of age group  $\leq 25$  years age group and 20% of 26-30 years age group have invested in deposit, while 21% of 31-35 years age group and 19% of >35 years age group have invested in insurance. The need for insurance is felt in the later middle aged group and elder people.

## 7. LIMITATION OF THE STUDY

- Sample size of the study is 405 salaried educated Investors in Coimbatore city. The sample size may not adequately represent the national market.
- This study has not been conducted for a longer time horizon covering market ups and downs. The state of market has a significant influence on the buying patterns and preferences of Investors. The study was conducted during a particular period of time and hence it will not be applicable for all periods.
- The study being based on a survey of Investors, it includes all limitations inherent in the questionnaire form of research.

## 8. FINDINGS & CONCLUSIONS

From this research, it is evident that there is significant association between age and their investment objective. Wealth maximization is primitive objective among  $\leq 25$  and 26-30 years age group while child future is primitive objective for 31-35 and >35 years age group. There is no association between age and their risk profile, while annual individual income has association with age group significantly. The research shows that as individual annual income increases with age. It is also noticed that there exists association between age group and their income-expense ratio. It is evident that income is greater than expense for the age group > 35 years (51.9%), while expense is greater than income for  $\leq 25$  years of age group (33.9%). High financial dependency is noticed in the age group 26-30 years (61%). Among  $\leq 25$  years age group (47.2%) parents are the investment decision maker, while respondents of 31-35 years age group (29.2%) spouse is the investment decision maker and >35 years (60%) of age group have stated they make self decision on investments. there is significant association between age group and their most preferred investment avenue. The respondents of all age group have ranked deposit as first and it's their most preferred investment avenue. Gold is second ranked investment avenue among the age group other than  $\leq 25$  years age group. There is significant relationship between age and number of avenues invested and it is evident that as age increase the diversification of investment is happens. 24% of respondents of age group < 25 years age group and 20% of 26-30 years age group have invested in deposit, while 21% of 31-35 years age group and 19% of >35 years age group have invested in insurance. The need for insurance is felt in the later middle aged group and elder people. Hence we conclude that there are differences in opinion, choice, need, selection of investment avenues with regard to age difference.

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**9. SUGGESTIONS**

The need for financial planning is lacking among the youth, for which the awareness of investment choice, and the guidance from their parents, friends would facilitate them to make investments. Early investment planning and selection of appropriate investment avenues which best suits their risk profile would facilitate their investment objective within stipulated tenure.

**REFERENCE**

- Antonides, G., and N.L. Van Der Sar. (1990). Individual expectations, risk perception and preferences in relation to investment decision-making, *Journal of Economic Psychology*, 11(2), 227-45.
- Grable, J. E, Samantha McGill, Sonya Britt,(2009) Risk Tolerance Estimation Bias: The Age Effect, *Journal of Business & Economics Research* – July, 2009, Volume 7, Number 7
- Grable, J. E., & Roszkowski, M. J. (2007). Self-assessments of risk tolerance by women and men. *Psychological Reports*, 100, 795-802.
- Kothari, C.R. (2004). *Research Methodology - Methods and techniques*, New Delhi: New Age International Publishers, 2nd Edition.
- Palanivelu, Chandrakumar ( 2013), A Study on Preferred Investment Avenues among Salaried Peoples with Reference to Namakkal Taluk, Tamil Nadu, India, The 2013 IBEA, International Conference on Business, Economics, and Accounting 20 – 23 March 2013, Bangkok – Thailand
- Priyanka Jain (2012), Investment Avenues, *International Journal of Advancements in Research & Technology*, Volume 1, Issue6, November-2012
- Singh J and Chander S (2006), “Investors’ Preference for Investment in Mutual Funds: An Empirical Evidence”, *The IUP Journal of Behavioral Finance*, Vol. 3, No. 1, pp. 55-70.

**WEBSITE**

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## **LEVERAGING HUMAN CAPITAL: DIMENSIONS OF VALUE CREATION**

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“Take away my trade, take away my avenues of transportation, take away my money, but leave me with my people and I will have reestablished myself within four years of time.”

- **Andrew Carnegie**  
**US Industrialist**

“At a time when a global talent war is on, its time companies took stock of their human capital and found out how to not only value and treat people, but also maximize return on investment.”

- **Brian Fiedman**  
**Management Consultant**

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### **ABSTRACT**

*There was a time when it was believed that future happens. Today the world seems to be convinced that the future of an organisation can be skillfully crafted through effective harmonization of resources, capabilities and competencies. Most of an organisation's resources are material objects that usually depreciate in value over time, its human resources can and should appreciate substantially in value as years pass. Thus leveraging human capital has been recognized as one of the most potential means to enhancing organizational efficiency and productivity in 21<sup>st</sup> century. Human capital provides the most intangible, yet differentiable, contribution to build the organizational culture and enable an organisation to achieve its vision and mission.*

*Information and knowledge are the thermonuclear competitive weapons of our time. Knowledge is more powerful and valuable than natural resources, big factories and fat bankrolls. Wal-Mart, Microsoft, and Toyota did not become great companies because they were richer than Sears, IBM and General Motors. But they had something far more valuable than physical and financial assets. They had Intellectual capital. Hence a 21<sup>st</sup> century organisation's success will depend on the effective use of talented people. As such learning organizations will constantly search for new knowledge and new talent in their employees, use them effectively and create a challenging environment for them to work in. Ultimately the driving force behind the 21<sup>st</sup> century organizations are its human capital. The authors are of the view that in leveraging the human capital to the maximum possible extent various dimensions such as Empowerment, Personnel renewal, Organisational ethos and culture, Learning organisation, Knowledge management and of Retention talent will play an increasing role in 21<sup>st</sup> century value creation and achieving excellence.*

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### **INTRODUCTION**

In the wake of liberalization in India, the industrial environment in which organisations conduct their business has become fiercely competitive and dynamic. The business approach and philosophies and that were applicable in the past few decades are no longer relevant. Mankind is moving irrevocably towards a global society. Every business in the recent past, has been dominated by intense and aggressive competition from every conceivable corner of the globe. This strongly demands that corporations should respond rapidly, appropriately and innovatively, or face the alternative... quite simply, go out of business. Today, nations are attempting to take their place in a global economy. With the total change in the economic scenario, it became imperative for the Indian industry to embark on a measure a reshaping exercise for strengthening their human capital to meet the emerging opportunities for sustainable competitive advantage.

### **HUMAN CAPITAL DEVELOPMENT**

Ask three people in your organization to define “human capital development”, and you will probably receive three different responses. For example:

- ❖ A direct report may focus on upward mobility (“what can I do to get a promotion?”).
- ❖ A manager may speak to employees’ motivation, productivity, and management (“What can I do to encourage my employees to do their best work?”).
- ❖ A senior-level executive may address issues such as what it takes to retain and grow top talent to help lead the company in the future (“What do we need to do ensure that we have the people with the best skills in the right places throughout our company in the future?”).

Regardless of your vantage point in the organization, human capital development can be defined a process intended to manage employees’ professional growth. Ideally, this process is integrated with as organization’s performance management program, but it remains distinct from routine performance evaluations.

## APPROACHES TO HUMAN CAPITAL DEVELOPMENT

Over the past few decades, the approach to human capital development has shifted in many organization. Numerous companies have adopted more expensive models of what development looks like. The following table gives you an idea of how these expensive models compare to previous models:

Old Approach	New Approach
Only poor performers need development.	Everyone in an organization can be developed, especially high and solid performers.
Development is the responsibility of the <u>human resource group</u> .	Human capital development is every <u>manager’s Responsibility</u> .
Career development focuses on moving <u>capable employees</u> of a predictable corporate ladder.	Career development focuses on moving employees through new challenges to <u>strengthen</u> their professional abilities.
Development means “training” (i.e. internal <u>seminars or weekend workshops</u> ).	Development may include training but it also <u>means informal, on-the-job ways of learning</u> , such as: <ul style="list-style-type: none"> <li>• “Stretch” assignments</li> <li>• Job rotations</li> <li>• Self-paced e-learning</li> <li>• Action learning</li> <li>• Manager coaching and feedback</li> <li>• Mentoring</li> </ul>

## LEVERAGING HUMAN CAPITAL

### People: - The Key Resource

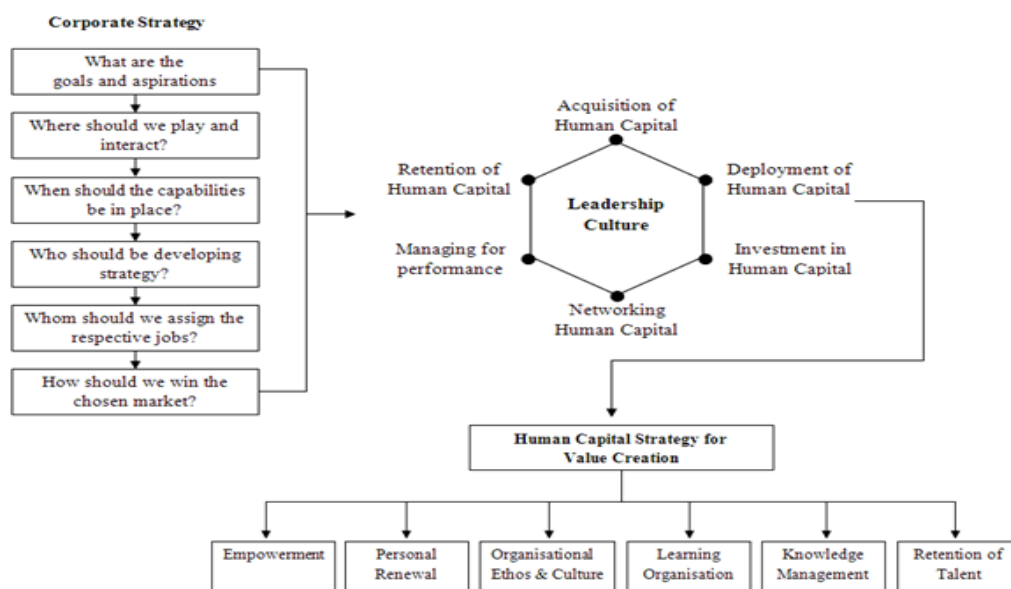
Experiences have shown that commitment and dedication of the people have an overwhelming impact on the success of a company. Several success-stories have also reinforced the conviction that it is the people who make the difference between success and failure. People should be viewed as "long term fixed assets". On several occasions, in spite of poor capital equipment and conventional technology, a determined group of people have produced the very best. Similarly, in many cases the latest in technologies and the best of equipment have yielded poor results because of lack of training and low motivation.

It is possible to buy technology which is best suited for business. It is also possible to design and implement good management systems and procedures. However, what is not possible to buy or transplant is the dedication and commitment of people. This has to be carefully nurtured and developed.



## **HUMAN CAPITAL STRATEGY FOR VALUE CREATION**

The transformation of organizations and people must be a continuous process of learning and renewal. The successful organization of the future will therefore be a high performing organization. As such it has the potential to enhance and optimize its human capital as detailed below:



### **EMPOWERMENT:**

Organisational objectives can only be achieved through people-based management practices. The management must make the employees understand what to do, how to do it, get the feedback of their performance. The people should also be encouraged to assume responsibility for the quality of their work. Employees can be more committed to the customer's delight, if they are involved more and more. Empowerment as such has five different approaches are practiced in Indian industries (i.e.) absolute empowerment, adaptive empowerment, tacit empowerment, collaborative empowerment and cosmetic empowerment to enhance productivity and performance.

Confucius statement is worthy of mention over here:

“Tell me        I    Forget  
Show me        I    Understand  
Involve me     I    Remember”.

### **PERSONAL RENEWAL**

One of the most effective ways to develop your personal mastery is to intentionally manage your current life. Every decision you make, large or small, either contributes to discovery or takes you further away from your God-given purpose. Care must be taken so your life is consistent with your values and passions. A personal renewal day is a time dedicated to the purpose of sharpening your game. It is a deliberate activity that brings you into greater awareness of God's call on your life. Anyone can do it, and the rewards are huge.

Start with your most significant and defining role. This is the one that tends to take up most of your time and attention, such as your job. To the right of that role, make a list of objectives you should accomplish to be effective in this role. Objectives can be goals, obligations, responsibilities and “to do” items. For the sake of

focus you may want to limit these to the important things you should do during the next year. Effectively use personal renewal strategy and your life will change.

### **ORGANISATIONAL ETHOS & CULTURE**

Dominant values accepted throughout the organization are called core values. Core values give the organization a distinct identity, which is known as organizational ethos. Eight core values, collectively known as **OCTAPACE**, denoting eight steps to create functional organizational ethos, have been defined. These are briefly explained as follows:

- |                       |   |
|-----------------------|---|
| i. Openness           | : Spontaneous expression without defensiveness; |
| ii. Confrontation     | : Facing problems;                              |
| iii. Trust            | : Honoring mutual obligations & commitments;    |
| iv. Authenticity      | : Congruence between feeling, saying, doing;    |
| v. Proaction          | : Pre-planning and preventive action;           |
| vi. Autonomy          | : Freedom to act in one's own sphere;           |
| vii. Collaboration    | : Team spirit;                                  |
| viii. Experimentation | : Innovative approach.                          |

Organisations will flourish when problems are confronted, mutual obligations and commitments are honoured, freedom is given to take decisions and act, team spirit prevails and innovative approach is encouraged. Confrontation, Trust, Autonomy, Collaboration, and Experimentations would therefore have positive impact on overall performance.

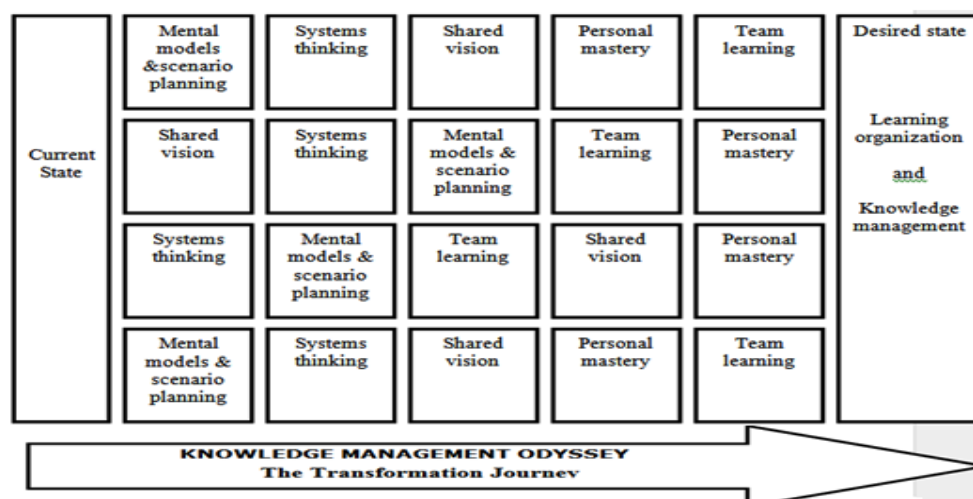
### **LEARNING ORGANIZATION INTERFACE**

Several prominent experts and authors have written a lot on the concept of learning and knowledge, but it was only Prof. Peter Senge's book on learning organizations, that made the term "Learning Organization" popular. This has further led to popularize the concept of Knowledge Management (KM). According to him a learning organization possesses the following features:

- It continuously expands its capacity to create its future.
- It believes in its people to acquire a distinct competitive advantage.
- It provides for collective learning by motivating total employee involvement, and nurturing their creative and innovative ideas.
- It develops structure and designs, best suited to its employees so as to enhance organizational capabilities in achieving excellence.

### **KNOWLEDGE MANAGEMENT**

In the present era of globalization and more particularly in the academic world, the concept of learning organizations – those practicing knowledge management is not new. Several authors have written a lot on the concept, but it was only Prof. Peter Senge's book on learning organization, that made the term "Learning Organization" common. This has alternatively led to popularize the concept of Knowledge Management (KM). According to him "people continually expand their capacity to create results they truly desire; where new patterns of thinking are nurtured; where collective aspiration is set free, and where people are continually learning how to learn."



## RETENTION OF TALENT

In today's new 'global village', corporations are realizing that any one can source out materials, capital and event technology very easily. At the same time they are also realizing that the only aspect that can help them differentiate is the quality of their 'talent'. Attracting, developing and retaining talent has therefore become a foremost strategic issue high on the agenda of CEOs.

Talent Management is the most critical Business Process. Organisations are spending a 'disproportionate' amount of time in this area. An effective management of this process is helping many organisations to accept at execution and gain total leadership. It is the intangible asset of talent that adds the greatest value to a company's balance sheet. The more we invest in this area, the more valuable our companies will become. It is no wonder that it is being called the mother of all imperatives!

## A HUMAN CAPITAL SCENARIO FOR TOMORROW

The world of human resource will change dramatically in the coming decades, but the adjustment to new organisational needs, new technologies, new market realities and new products, will happen much slower than the development of these factors.

All signs point in the directions that organisations will have to achieve higher productivity in order to maintain competitiveness for their long-term survival, i.e. they will have to add more value to our world with fewer resources, than they did in the past. This process will lead to the disappearance of many jobs of today and generate many more new, but different jobs in the near future.

At the same time, industries will produce more than needed for ever growing markets. Human and other resources previously employed by military productions will increasingly be set free by those industries. Job losses and subsequently unemployment, will not be only a cyclical experience by specific groups of people, but will become part of our human life style. The generation of tomorrow will have to abandon the idea of life long, employment and will be offered the opportunity to change jobs five to six times during their work lives.

The new world of our human work raises new questions, but offers many more new opportunities:

- ❖ Employees and managers without national and cultural borders will contribute to a new dimension of human work and employment.
- ❖ Our human knowledge doubles every five years.
- ❖ The organisational search and drive for total quality in all areas of manufacturing, service and information has only just begun.
- ❖ Today's economy is challenged by increasing privatisations processes.
- ❖ High-technology has just entered our day-to-day private and working lives.

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Answering these questions will require creative and innovative courage of those, who are intimate with and therefore, responsible for our world of work.

## CONCLUSION

The high performance organisation will optimise its realisation of the performance potential of human capital. It will not have the same meaning, as in the time of Frederick W. Taylor or Henry Ford, to squeeze the most out of people through the optimum technical processes but rather by creating working conditions in which people can derive satisfaction, by working at their best. And that means their best performance in the interests of customers, the business, and their own well-being.

So you strive to develop your human capital, keep in mind that there is no one-size-fits-all approach. You must respond to your organization's unique business context and to your individual employees' values, skills, and interests in this ever changing and dynamic business environment of 21<sup>st</sup> century.

## REFERENCES

- Charan, R., Drotter, S. and Noel, J. (2011). *The Leadership Pipeline. Wiley India Pvt. Ltd., New Delhi*, 2<sup>nd</sup> edition, p-37.
- Drucker, P. F. (1992). *Managing for the future. Tata McGraw-Hill Publishing Company Limited, New Delhi*, p-319.
- HRD Review, 9(1), March 2010. *Organisational Politics and HRD. SAGE publications, Thousand Oaks, CA 91320*, p-26.
- Kohli, U. and Sinha, D. P. (1994). *Human Resource Development: Global Changes and Strategies. Allied Publishers Limited, New Delhi*, p-65.
- *Managing the Future. Proceedings of 33<sup>rd</sup> National Management Convention organised by All India Management Association during 6<sup>th</sup>-7<sup>th</sup> October, 2006, New Delhi.*
- Nair, M. R. R. And Rao, T. V. (1999). *Excellence through Human Resource Development. Tata McGraw-Hill Publishing Company Limited, New Delhi*, p-135.
- Smartsizing: How to manage the downsizing and upsizing of your business. *Business Today, October-November 2006*, p-47.

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## **A STUDY ON ENTREPRENEURIAL ATTITUDE OF YOUNG FEMALES WITH SPECIAL REFERENCE TO NILAMBUR MUNICIPALITY IN THE SOUTH MALABAR REGION OF KERALA STATE**

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### **ABSTRACT**

*Entrepreneur is defined as an individual who organizes or operates a business or businesses. He is an innovative person who maximizes his profit by following new strategies or venturing into new products or services. Women Entrepreneurs may be defined as the women or a group of women who initiate, organize and operate a business enterprise. Government of India has defined women entrepreneurs as an enterprise owned and controlled by a women having a minimum financial interest of 51% of the capital and giving at least 51% of employment generated in the enterprise to women. Like a male entrepreneurs a women entrepreneur has many functions. They should explore the prospects of starting new enterprise; undertake risks, introduction of new innovations, coordination administration and control of business and providing effective leadership in all aspects of business. This is an attempt to evaluate entrepreneurial attitude among young women in Nilambur area. Nilambur is a municipality and a taluk in the Malappuram district of Kerala, India. It is about 40 kilometers from Malappuram city and 24 kilometres from Manjeri on the Calicut–Gudalur road.*

*Keywords: entrepreneurship, female entrepreneurs, nilambur municipality, Malabar region*

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### **INTRODUCTION**

Women constitute about 50% of the world population. Studies have shown that successful Women entrepreneurs start their businesses as a second or third profession. Because of their previous careers, women entrepreneurs enter the business world later on in life, around 40–60 years old. As women are now overtaking their male peers when it comes to education having higher education degrees is one of significant characteristics that many successful female entrepreneurs have in common.

In modern society they are taken part in all areas of life. It is estimated that presently women entrepreneurs comprise about 10% of total entrepreneurs in India. Since the contribution from women to the economy as an entrepreneurs plays a vital role. So this study is relevant in present era.

### **STATEMENT OF THE PROBLEM**

There are successful women entrepreneurs in Kerala. But the numbers of women entrepreneurs are compared to men entrepreneurs are few. There are so many factors that play a vital role in the determining the quantum of women entrepreneurs .since this can be considered as research problem based on which data are collected, measured, analyze and interpret.

### **OBJECTIVES OF THE STUDY**

- To analyze entrepreneurial interest among young women.
- To identify the challenges faced by women entrepreneurs.
- To examine the motivating factors of women become an entrepreneur.

### **METHODOLOGY AND DATA COLLECTION**

- **Scope of the Study**

➤ This study is conducted among young females in Nilambur municipality

- **Methodology**

This study is based on both primary and secondary data. The primary data is collected through questionnaire specially designed for this survey and through unstructured interviews. And secondary data is gathered from the

relevant journals, web sites and other sources. For this study, south Malabar region was selected via lottery method from Kerala state, similarly municipality also.

(A) **North Malabar**

- Kasaragod
- Kannur (Cannanore)
- Calicut (Kozhikode)

(B) **South Malabar**

- Wayanad
- Malappuram – Nilambur municipality
- Palakkad

(C) **Central Kerala**

- Thrissur
- Ernakulam (Kochi/Cochin)

(D) **South-central Kerala**

- Kottayam
- Idukki

(E) **Central Travancore**

- Alleppey (Alappuzha)
- Pathanamthitta

(F) **South Travancore**

- Quilon (Kollam)
- Trivandrum (Thiruvananthapuram)

## ❖ THEORETICAL FRAMEWORK

### ⇒ Entrepreneur

The entrepreneurship is very old concept according to which anyone who runs business is called an entrepreneur. The more precise meaning of entrepreneur is; one who perceives a need and then brings together manpower, material and capital required to meet that need. Entrepreneur is one who understands the market dynamics and searches for change respond to it and exploit it as an opportunity.

### ⇒ Female entrepreneur

The concept of female entrepreneurship is becoming a global phenomenon playing a vital role in the business community.

A female entrepreneur is an adult who owns and runs an enterprise, especially a commercial one, often at personal risk. An ILO-Indian study of female entrepreneurs gave the definition of female's enterprise as 'a small unit' where one or more female entrepreneurs have not less than 50 percent financial holding.

Studies have shown that successful female entrepreneurs start their businesses as a second or third profession. Because of their previous careers, female entrepreneurs enter the business world later on in life, around 40–60 years old.

### ⇒ Need and importance of female entrepreneurs

It is imperative to note the participation of female in economic activities as self-employed individuals. Many of the traditional occupations open to female were mainly based on caste, creed and the nature of self – employment based on the standard of living. Presently, female are generating employment for themselves in an unorganized sector and another category of female who provide employment for others.

The country needs to mobilize and utilize fully all its resources. The participation of female in economic activities is necessary not only from a human resource point of view but also is essential even from the objective of raising the status of female in the society. The economic status of the female is now accepted as an indicator of society's stage of development and therefore it becomes imperative for the government to frame policies for development of entrepreneurship among female. The long – term objectives of the development programs for female should aim to raise their economic and social status in order to bring them in to the main stream of national life and development. For this, due recognition has to be accorded to the role and contribution of female in the various social economic and political and cultural activities.

⇒ **Functions of female entrepreneurs**

A female entrepreneur has also to perform all the functions involved in establishing an enterprise:

- ✓ Functions for establishment of an enterprise
- ✓ Idea generation and screening
- ✓ Determination of objectives
- ✓ Undertaking a risk and handling of economic uncertainties involved in business
- ✓ Project preparation
- ✓ Product analysis
- ✓ Introduction of innovations , imitations of innovations
- ✓ Form of business
- ✓ Co-ordination and control
- ✓ Raising funds
- ✓ Supervision and leadership
- ✓ Procuring men , machine and materials and operations of business

⇒ **Female Entrepreneurs and Their Problems**

- Arrangement of Finance
- Cut – throat Competition
- Lack of education and prevalent levels of illiteracy amongst females
- Family conflicts
- Marketing Problems
- Lack of self –confidence and optimistic attitude amongst females
- High cost of production

⇒ **Female entrepreneurs in India**

Around 50 per cent of India's population is Female and 'yet, business spheres such as trade, commerce and industry, is still considered a male preserve. Entrepreneurial work has also been a predominantly a man's world in India. This is based on the fact that only seven percent of the total entrepreneurs in India are females.

In India ladies have made a late entry in to business scenario mainly due to the orthodox and traditional socio – cultural environment. Although females face various problems in the process of establishing , developing and running their enterprise , nevertheless , their scope of development is very high in India , especially in rural areas with more ladies making development – oriented programme via, Development of females and Children in Rural Areas , (DWCRA) launched in and being implemented in 1982-83.

Indian women are in no way inferior to men in all walks of life and they can be as good entrepreneurs as men in the country. Therefore, it is essential to exploit the potential of Indian ladies. Women's participation in trade, industry and commerce, requiring entrepreneurship, is still poor mainly because of the problems associated with their gender roles. Therefore, promotion of entrepreneurship and economic empowerment of females poses a challenge to the government, funding agencies and non – government organizations. It is important for these people to focus on the limitations faced by the women and to plan supporting systems to enhance the female entrepreneurship in India.

❖ **ANALYSIS AND INTERPRETATIONS**

**TABLE 1:Age Wise Classification of Respondents**

Age	Number of Respondents	Percentage
18 – 22	9	30.00%
22 – 26	8	27.00%
26 – 30	13	43.33%
<b>Grand Total</b>	<b>30</b>	<b>100.00%</b>

(Source: based on primary data)

**Interpretation:**

The above table 1 shows the age category of respondents. 30 % of respondents are comes under the category 18 – 22 age group, 27% of respondents are of 22 – 26 age group, 43 % of respondents are of 26 – 30 age group.

**TABLE 2: Educational Qualification of Respondents**

<b>Education Qualification</b>	<b>Number of Respondents</b>	<b>Percentage</b>
SSLC Or Less	4	13.33%
Plus Two	14	46.67%
Degree	10	33.33%
PG or Above	2	6.67%
<b>Grand Total</b>	<b>30</b>	<b>100.00%</b>

(Source: based on primary data)

**Interpretation:**

The above table 2 showing educational qualifications of respondent 13% of respondents having only SSLC qualification or less , 47% of respondents having plus two qualification, 33% of respondents having DEGREE qualification and the remaining respondent of 7% having PG or above qualification.

**TABLE 3: Response about Critical Factor in Entrepreneurship**

<b>Critical Factor In Successful Entrepreneurship</b>	<b>Number of Respondents</b>	<b>Percentage</b>
Capital	6	20.00%
Business Education	4	13.33%
Attitude	12	40.00%
Mission and Vision	8	26.67%
<b>Grand Total</b>	<b>30</b>	<b>100.00%</b>

(Source: based on primary data)

**Interpretation:**

Table 3 shows the details about critical factor in successful entrepreneurship. 20% of respondents prefer capital as critical factor, 13% of respondents prefer business education, 40% prefer attitude as critical factor and left 27% of respondents prefer mission and vision.

**TABLE 4: Response about Male Dominance over Female Entrepreneurs**

<b>Male Dominance Over Female Entrepreneur</b>	<b>Number of Respondents</b>	<b>Percentage</b>
Yes	15	50.00%
No	15	50.00%
<b>Grand Total</b>	<b>30</b>	<b>100.00%</b>

(Source: based on primary data)

**Interpretation:**

Table 4 reveals that the dominance of male entrepreneur over female entrepreneur. 50% of respondents says that there is dominance of male entrepreneur over female entrepreneur and 50 % of respondents have the opposite opinion.



**TABLE 5 :**Response about Most Attractive Factor in Entrepreneurship

<b>Most Attractive Factor</b>	<b>Number of Respondents</b>	<b>Percentage</b>
High Profit Potential	13	43.33%
Power of Authority	8	26.67%
Social Status	7	23.33%
Ego Satisfaction	2	6.67%
<b>Grand Total</b>	<b>30</b>	<b>100.00%</b>

(Source: based on primary data)

**Interpretation:**

Table 5 shows the respondent's views about attractive factor in entrepreneurship. 43% of respondents are of the opinion that it is high profit potential, 27% of respondents are of the opinion that it is power of authority, 23% response that the social status is attractive factor and the remaining 7% have the opinion that ego satisfaction is the attractive factor.

**TABLE 6 :**Response about Support from Government

<b>Government Support</b>	<b>Number of Respondents</b>	<b>Percentage</b>
Yes	14	46.67%
No	16	53.33%
<b>Grand Total</b>	<b>30</b>	<b>100.00%</b>

(Source: based on primary data)

**Interpretation:**

Table 6 reveals that the respondent's response about government support to women entrepreneurs. 53% of respondents have the opinion that government has given enough support and 47% have opposite opinion.

**TABLE 7 :**Response about the Challenging Factors

<b>Challenging Factors</b>	<b>Number of Respondents</b>	<b>Percentage</b>
Family Constraints	17	56.67%
Finance	10	33.33%
Male Dominance	3	10.00%
<b>Grand Total</b>	<b>30</b>	<b>100.00%</b>

(Source: based on primary data)

**Interpretation:**

Table 7 shows the respondents response towards commonly faced challenging factor by a women entrepreneur. 57% of respondents have the opinion that it is family constraints, 33% of respondents choose finance as challenging factor and remaining 10% have the opinion that male dominance is the challenging factor.

**FINDINGS**

- The study was conducted on the respondent's falls under the age category 18 – 30. 30% of respondents fall under the group 18 – 22 and the rest 70% falls under the age group 22 – 30.
- 40% of respondent believe that attitude is most critical factor in entrepreneurship. Only few people believe that entrepreneurship needs business education.
- Half of the respondents believe that there is male dominance over female entrepreneurs.

- Most of the respondents have the opinion that the most attractive factor in entrepreneurship is its high profit potential
- 63% of the respondents have the opinion that there is not enough support from government. Most of the ladies are faced tough challenge of family constraints which is set back them from entrepreneurship.

## CONCLUSION

The study on entrepreneurial attitude among young females proves evident that majority of the females are interested in entrepreneurship. The most important factor attracted them to entrepreneurship is high profit potential. But there are factor that hinder them from entrepreneurship. The most important challenging factor faced by them is family constraints.

Even though there are programs by government to promote entrepreneurship among females. The study reveals the public were either not aware about programs or they did not get its benefits.

## REFERENCE

- Renu Arora, S.K Sood (2009): *Entrepreneurial Development and Management*, Bookshop of India, Ashok Vihar, New Delhi - 110 052. ISBN-8127235987
- Tiwari Anshuja (2007): *Women Entrepreneurship and Economic Development*, Sarup & Sons, 225 pages, Daryaganj, New Delhi-110002. ISBN: 9788176257053

## Websites

- a) [en.wikipedia.org/wiki/](http://en.wikipedia.org/wiki/)
- b) [www.slideshare.net](http://www.slideshare.net)
- c) <http://onlinelibrary.wiley.com>

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**INDIAN KNOWLEDGE WORKERS IN SAUDI ARABIA:RE-EXPLORATION OF BRAIN DRAIN**

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**BACKGROUND**

Geographically, Kingdom of Saudi Arabia is an integral part of Gulf and the largest of the region, occupies 79% land of the Arabia Peninsula. It covers roughly twenty six million inhabits predominately Arabic speaking and have core followers of Islam mostly Sunni Sects. It is the largest producer of Petroleum within the Organization of Petroleum Exporting Countries (OPEC) and presumably world's fourth largest petroleum products, including natural gas, gypsum, dates and remains the nerve of Oil Diplomacy.

Socio-historically a part of Islamic Reform Group, Saudi Arabia is well known for its Islamic identity since the inception of Prophet era in early seventh century. Though officially India's economic relations with Saudi Arabia began in 1970, it was 1990s, when both nations took bilateral steps to improve ties and signed several pacts with oil companies. Riyadh based, Indian Engineers Forum (IEF) remains a constant source of inspiration in various streams in collaboration and cooperation of entrepreneurs. Saudi Kingdom has supported granting observer status to India in the Organization of the Islamic Conference (OIC) and has expanded its cooperation with India to fight against global terrorism. In January 2006, Honourable Emir Shaikh Abdullah of Saudi Arabia made a special visit to India and became the first Saudi monarch in 51 years to do so. The Saudi King and the Indian Prime Minister Manmohan Singh signed an agreement forging a strategic energy partnership termed as "Delhi Declaration." <sup>1</sup> It provided for a

"reliable, stable and increased volume of crude oil" supplies to India through long-term contracts. Both nations also agreed on joint ventures and the development of oil and natural gas in public and private sector.<sup>2</sup> Indo-Saudi joint declaration in the Indian capital New Delhi described the king's visit as "heralding a new era in India-Saudi Arabia relations.

Since 1990s, India's economic liberalization has helped bolster trade with Saudi Arabia, which annually supplies to India nearly 175 million barrels of Petroleum, 25 million metric tons of crude oil that fulfill India's 25% needs.<sup>3</sup> In 2006-2007 bilateral trade stood at US\$ 16 billion (US\$ 3 billion excluding oil). During the year 2009-2010, India's current exports to Saudi Arabia stood at US\$ 2.6 billion, while Saudi Arabia's exports are in the range of US\$ 13.4 billion (US\$ 1.2 billion excluding oil). India's major exports include basmati rice, spices, textiles and garments and machinery, while it import articles include: organic and inorganic chemicals, metal scrap, leather, gold and oil from Saudi Arabia. Both nations are expected to expand trade and cooperation and joint ventures in telecommunications, pharmaceuticals, health services, information technology, biotechnology, agriculture, construction projects, energy and financial services. Both countries also agreed to launch joint ventures for developing gas-based fertilizer plants in Saudi Arabia. India agreed to set up institutes of higher education and research, provide educational opportunities in India for Saudi students and expand cooperation between India's Council for Scientific and Industrial Research and the Saudi Arabian Standards Organization (SASO). With highly skilled labour force, where large number of medical practitioners engineers, management consultants and English teachers were recruited apart from large number of semi skilled labours. Most of them come from Uttar Pradesh, West Bengal, Punjab, Tamil Nadu, Andhra Pradesh and several other parts of India. Several sectors like bio-technology, automobiles and space research are yet to be operational in years to come.

Indians have been duly respected at all echelons of the Saudi society is evidently know for rapid growth and vital economic development. By a conservative estimate, Indians contribute over US\$4 billion (16 billion Saudi Riyal) per annum which remain highest in term of annual contribution of foreign currency. Even Saudi King has generously contributed to India during drought, hunger, tsunami, starvation, earthquake and flood affected people.<sup>4</sup> Saudi employers is convinced that Indians give value for money that they are loyal and disciplined, and have successfully established silent relations with local communities. Indians have successfully established International Indian Schools in major cities like Jeddah, Riyadh, Dammam, Jubail, Taif, Buraidha, Tabik, etc where more than 32,000 students attend. In short, India's economic relations with the Kingdom of Saudi Arabia is marked for hospitality, cordiality and freedom.<sup>5</sup>

**INFLUX OF INDIANS IN SAUDI ARABIA**

Between 1970s and early 1990s, Saudi Arabia experienced the largest influx of labour from India as the major source of revenue. IT Revolution in 1990s played a crucial role and fostered strong business connection between India and the Saudi Arabia that indeed increased the inflow of Indians and brought remarkable paradigm shift in the relationship between India and the Indians in Gulf. Influx continues even today as the Kingdom has opened wider avenues for Indian now and shown in the following table.

**Table: I Indian Labour Outflow in Saudi Arabia ( 2006-2013)**

2007	2008	2009	2010	2011	2012*	2013*
195,4307	228,4006	281,1100	275,1702	22,00000	2350000	2,450,000

**Source: Rafeeq Rahman, “India receives 45% of its international remittance from GCC countries”,** [http://twocircles.net/2011aug23/india\\_receives\\_45\\_its\\_international\\_remittance\\_gcc\\_countries.html](http://twocircles.net/2011aug23/india_receives_45_its_international_remittance_gcc_countries.html)

\*[http://en.wikipedia.org/wiki/Indians\\_in\\_Saudi\\_Arabia](http://en.wikipedia.org/wiki/Indians_in_Saudi_Arabia)

As the above table clearly shows the fluctuation of Indian population due to nature of work, early repatriation, new labor policy. In general, Indian’s demographic profile has shown moderately adjusted labour force of diverse categories. However, the forthcoming part of this paper will highlight highly skilled professionals from India in Saudi Arabia.

**HIGHLY SKILLED MIGRANT INDIANS IN SAUDI ARABIA: SOME UNIQUE FEATURES**

Nature has been kind enough with Gulf State to bless Oil Reserves with unimaginative stock that attracted the global attention even since. The inflow of massive oil revenues in seventies brought the Saudi Arabia into the global financial and political map with average highest Per Capita Income (PCI) in world. According to IMF calculations, PCI of Indians during the year 2011 stood US\$ 24056 while World Bank and CIA World Fact Book placed the figure as US\$26555 and \$26200 respectively which is roughly four time more than those counterparts working in India.<sup>6</sup> Data is based on 2011 calculations only and has been subject to revision on time to time. In short, Gulf nations continue to enjoy among the highest PCI in world that has been the major source of attraction for South Asians including India as the biggest labour force since last 35 years.

During eighties the exploration of oil at gigantic scale resulted in economic interaction with India where Gulf region became the added asset. Soon India’s resource management (Labour and technology) became the major investment market for Gulf. Thanks to nature that has gifted huge oil reserves, exploration in seventies and the subsequent developments. But it is not simply enough without labour management policy and several other well known facts. For better investment and higher returns, a review Immigration Policy is must where India became the best option for Saudi Arabia apart from some advance economies like USA, UK, Japan, Germany and lately China. Soon large number of Indians were recruited as Doctors, Engineers, Management Consultants, Computer Professionals, teachers, Charter Accountants, and host of other highly skilled category of labour force. Within the highly skilled category, the Engineers of varied categories included 11% (highest share) followed by Management & Software Consultants (7%), Medical Practitioners (3%) and other host of categories (4%). Admittedly, IT revolution and impact of globalization, the Saudi became more attractive and IT Expert of India was found a readily available market. It changed the perspectives of Emirs when large number of Egyptians, Syrians, Somalis and Libyans had no option but to go back to their respective home countries due to being non competent and poorly managed education. High level of brains from India became gains for Saudi’s economy. It proved boon in disguise to skilled based Indians who continue to work as major labour force with high grade of technical and professional abilities. With support of India, the Emirs successfully managed to conduct world class infrastructure like star hotels, multiplexes, shopping malls, electronic cities and professional organizations. Besides, Indians also helped in setting up various NGOs, schools and technical institutes based on demanding curriculums. In short, India has been an added asset for the Gulf in number of ways. The following table is an indicative one about the assignment and alignment of Indians in owned or jointly owned with Arabs in collaboration with large number of multinationals and social organizations. But the highest benefits went to Elite category of worker, often called as Blue Collar Workers, in terms of salary structure, facilities and contingencies. In short, India’s knowledge power has been helpful for

the economic reformation and labour policies for which Saudi Arabia always owe to India. The following table will given only a sketchy picture as how highly skilled Indians in Saudi Arabia been helpful in establish several ventures in the forms of economic association, cultural organization and professional NGOs that continue to remain as source of attraction for the Kingdom.

**Table II : Indian Association in Saudi Arabia (Selected ones only)**

List of Selected Associations	Key Target /Objectives
Indian Engineers Forum	Promotion of Engineers
Jamia Millia Islamia Alumni Association	Islamic Education, Research & Old Students Meet
Riyadh Indian Medical Association & Indian Doctors Forum	Doctors, Dentists, Nurses and medical related Professionals
Indian Council of Scientific and Industrial Research - Saudi Arabian Standards Organization	Joint Scientific Inventions & Research
Indian Space Research Organization - King Abdulaziz City for Science and Technology	Joint Space Research Programme
Saudi Indian Business Network (SIBN)	professional organization that groups together entrepreneurs, senior executives
India Forum Management Committee	Consultative Body for various Managerial efficiencies
Architect Association NRI	Design, civil and Interiors
Riyadh Chapter-Institute of Chartered Accountants of India	Financial Management
Sargam Fine Arts	Fine Arts, Theatre and Music

Sources, <http://www.imfuae.com>, <http://www.indembassyuae.org/drupal/MajorCompanies>

The list is exhaustive as it is the only indicative ones. Some more miscellaneous category of organizations and associations are: Al-Jufailah Corporation for Food Stuff, AP NRIs Association, Bhatiya Kala Kendra Art & Culture Society, Grandour, Tamil Sangam, Musical Wave, NRI Milli Forum, Pratibha, Royal Court, Riyadh Indian Friendship Association, Rainbow Cultural Association, Sargam Fine Art, Sher-e-Punjab Group of India, the Nightingales and Yahind Educational Society.<sup>7</sup>

## INDIAN KNOWLEDGE WORKERS SAUDI ARABIA: BRAIN DRAIN OR BRAIN GAIN

Six states of Gulf Regions (Saudi, UAE, Oman, Qatar, Bahrain & Kuwait) have common rules and regulations in terms of property rights where outsiders called as Migrant Workers have no rights to establish personal immovable property. Indians or Asians, no matter how qualified they are, often branded as ‘Sleeping Partners, Slow Movers and Keep Mouth Shut’. It ensures in Emirs enterprises to promote the task of assuring that the wealth generated in Gulf is significantly held by the locals only. Cases have been found even when highly qualified skilled Indian workers have no access of freedom to form any union. All decisions in fiscal and political management are solely at the discretion of Arabs thereby leading to controversial debate whereas citizens from White Origin (America and West Europe) often do not feel such discriminations. Gap between the sending and receiving countries on migration policies is thus matched by an asymmetry within the migrants and native populations on the question of who has the power to change the relationship. In Short, it is widely felt that manpower issue has become a critical subject throughout the Arab region. But the fear of a rapid demographic imbalance has also prompted a policy shift- ‘Saudization’ - which has led to a decline in numbers of skilled emigrant workers from India.

Saudi Kingdom is well known that India send highest number of highly skilled brains. Studies show that there are altogether over lakh doctors, engineers, teachers, professors, management consultants and other equally competent knowledgeable workers who are suitably rewarded for their entrepreneurial leadership and hard works. But the gap is always felt and realized whether it is business, social security, political decision makings

and the issue of nationality. Such discriminative tendency tends to lead emotional and personal deprivation and troublesome feelings results to unnecessary confusion. Cases have also been found where even highly skilled Indians do not prefer to accompany their wives, family members, near and dears even while saving on elite most positions, name and fame. Simply providing high salary and access of other facility are incomplete without social security. Of course Saudi Government provides among the best facilities to talented and white collar job holders as the best option but adequate personal security and future seems uncertainty and hence needs better assurance.

Question whether India should promote new immigration policy with hardly any concrete results, is a grave concern. Cases have been reported about the exodus of large number of women workers mostly nurses of medical profession from Andhra Pradesh (mostly *Hyderabadi*), Kerala, Tamil Nadu and Gujarat. It is in general the pressures of every families consisting of growing daughters and learning sons, that push many women into emigration. Ironically, however, despite lack of manned local resources, some Arabs do not want to change the hostile attitude and thereby promoted the downgraded status of Indians, unlike Europeans in many possible ways. In other way round, the impact of globalization have made Arabs conscious to upgrade the knowledge of their local fellows (Arabic Speaking) to undertake the new assignments in technical and professional fields. On the contrary, the impact of western education and greater realization about technical and professional education, large number of Saudi nationals prefer to obtain professional degrees from USA, UK, Canada, Australia and several other educationally competent nations. The sole intention is to employ their own citizens parity with elite and highly skilled assignments which automatically limit the scope of Indians as the professional qualified workers prefer to take assignments on the soil of Arab land only. The process has already began and for Indians, no option but to move back to India or elsewhere. Several studies have shown that large number of highly skilled Indians are undergoing trauma due to global recession or unexpected return to India with limited prospects. Craze of Indians to work in Gulf is thereby gradually declining. In a nutshell, the impact of economic liberalization have made Arabs conscious to upgrade the knowledge with their local fellows to undertake the new assignments in technical and professional fields which also means no more brain gains from India or South Asia. The time has come to reexamine the sacrifices of Indians knowledge workers in Saudi Arabia.

## **FINDINGS**

Since the resurgence of Petro -Dollar Gulf States, knowledge workers from India continue to suffer from stringent law and order. Emirs continue to be reluctant to handover political and economic power, instead of supporting policies to bring about a modest redistribution of wealth. On the contrary, in absence of qualified Indians the Emirs find difficult to manage the economic policies in several core areas. Even the diversification of oil revenue in other sectors like banking, insurance, health, hotels, social services, shopping complexes, theatres, etc, the Emirs cannot do without the help of qualified and hard working Indians. Undoubtedly, Indian brains will continue to flourish despite odds and challenges.

Indian migration in Gulf remain a controversial and debated topic ever since. While India continues to insist for social and economic security in Gulf, the current scenario does not permit do so. The social cost of immigration, forcible repatriation and the changing contours of Indo Saudi relations have also affected the course of migration. The matter of fact remains that Indians at any cost are not eligible to be citizens of Gulf owing to certain Islamic Laws or otherwise. Besides, the limitations of work permits, short time renewable contracts and reasoned poor social interaction with Emir families need to be examined in a broader perspective. Indians including Muslims from Asian countries have no option but to have their own recreational mechanism in the form of rituals, festivals, social meetings, and religious interactions.

For certain political compulsions, Government of India is unable to change the attitudes of sections of Emirs. Emergence of Gulf countries as oil-producing and exporting economies, the Emirs can bargain with India at any extent since India remains among the poorest countries in the world in term of oil revenue. India's stand to protect Indians in Gulf holds no good reason.

Oil-rich Gulf nations, already facing labor protests, are getting new pressure from India, which wants them to pay minimum wages. Gulf is losing its charm for many Indians working there. The economic boom in India, new set of migration policies, appreciating rupee and inflation in gulf countries are compelling professionals working in Saudi Arabia. Major attraction for many Indian youngsters moving to Gulf countries has been impressive salaries. But the recent employment boom has initiated monetary gains back in India itself.

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Despite several odds and differences, Indo-Saudi Bilateral need holistic approach to examine the identity crisis of Indians in Gulf. Despite limitations, Saudi Arabia remains the second home for Indians. Saudi Arabia is a great place to Live and Work and offers excellent potential to save money. But new labour law (*Nitaqat*) and *Saudization* gradually making tougher days for Indians in Saudi Arabia. To avoid any kind of confrontation, India needs to rebuilt its economic policy by providing professional facilities to earn and encourage better salary, competitive remuneration with comfortable placement to attract talents at homeland.

#### ENDNOTES AND REFERENCES

1. [www.thehindustanbusinessline.com](http://www.thehindustanbusinessline.com), Retrieved 2008-06-04
2. [www.money.cnn.com/2006/01/27/news/international/india\\_saudi](http://www.money.cnn.com/2006/01/27/news/international/india_saudi), Retrieved 2008-06-04.
3. [www.arabnews.com/?page=15 & section,](http://www.arabnews.com/?page=15&section=) Retrieved 2008-06-04 also see <http://in.rediff.com/money/2006/jan/23trade.htm>. Retrieved 2008-06-04.
4. Prakash Jain (2007), Ed ., *Indian Diaspora in West Asia: A Reader*, New Delhi: Lardson Publishers Pvt. Ltd, pp.318-19.
5. Ibid , pp.318-19.
6. [http://en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_GDP\\_%28PPP%29\\_per\\_capita](http://en.wikipedia.org/wiki/List_of_countries_by_GDP_%28PPP%29_per_capita),
7. [http://www.yahind.com/regional/ksa/associations\\_links.shtml](http://www.yahind.com/regional/ksa/associations_links.shtml)

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## **SUCCESSION PLANNING IN SMEs: AN EMPIRICAL ANALYSIS**

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### **INTRODUCTION**

*“Failing to plan is planning to fail”*

Any organisation that wants to thrive and compete must have plans in place so that the right people are in the right place at the right time to achieve successful organisational outcomes. Those that choose not to plan will most likely continue to adopt very reactive approaches that rely overwhelmingly on outside hiring. They are most at risk of failing to replace talented staff in a period of increasingly large skills shortages. A deep bench of talent is the most important asset if organisations want to operate successfully into the future. Those organisations that will move from being good to great over the next decade will be those that have put in place effective succession planning.

The practice of succession planning has been around for hundreds of years. Its roots exist in the dilemmas of managing transitions of power in royal families and in business dynasties. In organisations succession planning is about building pools of candidates who possess critical capabilities that are required to meet the short and longer term objectives of the organisation. Effective succession planning is a form of future proofing. It assists the enterprise to adopt and sustain specific strategic positions into the future that will allow the achievement of its vision, goals and specific objectives. Succession planning involves a projection of future needs in terms of the capabilities that staff will need to have to fill key positions that support the business.

Succession planning can be defined as an on-going process of identifying, assessing, and developing leadership talent alongwith recognizing key contributors to meet future organizational needs. Huang (1999) defines succession planning as “any type of formal rules or procedures in arranging for managerial succession”. Succession is a reciprocal interaction that occurs between the predecessor and successor throughout the transferring process of leadership (Churchill & Hatten, 1987). It is more than an event and a multi-staged development that continues over time (Churchill & Hatten, 1987). The succession requires an in-depth analysis from a holistic perspective of family, management and ownership systems in order to understand adequately the interests of the different stakeholders (Brochhaus, 2004). According to Charan, Drotter and Noel (2001), succession planning is a process of identifying and developing internal people with the potential to fill key business leadership positions in the company. Succession planning increases the availability of experienced and capable employees that are prepared to assume these roles as they become available. They further postulated that effective succession or talent-pool management concerns itself with building a series of feeder groups up and down the entire leadership pipeline or progression. Corporate Leadership Council (1998) posited that the fundamental to the succession-management process is an underlying philosophy that the top talent in the corporation must manage for the greater good of the enterprise. The Council posited that a "talent mind-set" must be part of the leadership culture for these practices to be effective. Further, the Council suggested that SMEs benefit from succession planning by retaining high degrees of engagement among the larger leadership team in the business. To the Council, clear objectives are critical to establishing effective succession planning.

These objectives tend to be core to many or most companies that have well-established practices:

1. Identify those with the potential to assume greater responsibility in the organization,
2. Provide critical development experiences to those that can move into key roles,
3. Engage the leadership in supporting the development of high-potential leaders,
4. Build a data base that can be used to make better staffing decisions for key jobs,
5. Improve employee commitment and retention,
6. Meet the career development expectations of existing employees, and
7. Counter the increasing difficulty and costs of recruiting employees externally.

Succession planning, a problem faced by family operated businesses (FOBs), is the process whereby the firm's management and control will be passed on to the next generation. Successful succession of CEOs is a crucial



goal for these firms; without the next generation's leadership and direct management, the firm cannot survive as a family-owned firm, let alone maintain its character (Barach and Ganitsky 1995). Several research studies (Beckhard and Dyer 1983, Lansberg 1988 and Maynard 1999) have put forth that when owners retire, less than one-third of family-owned businesses are carried out by the next generation. Researchers have continued to highlight succession planning's importance in ensuring the continuity and prosperity of a business (Christensen 1953, Ward 1987 and Ward 2000). Few researchers have stated that dealing effectively with the issue of succession planning is the ever-lasting gift one generation can bestow upon the next. Unfortunately, succession planning has continued to be ignored by many family-owned firms (e.g., Leon-Guerrero et al. 1998, Rue and Ibrahim 1996). Some researchers attribute this neglect of succession planning to the emotions generated by the process; it forces incumbents to face their mortality and makes other family members confront the need for change (Beckhard and Dyer 1983, Dyer 1986, Lansberg, 1988). The succession process for small family-owned firms is quite different from large firms due in large part to the coincidence of family and business interests in the smaller firms (Davis 1983, Lansberg 1983, Fox et al. 1996). The appointment of Mr. Cyrus Mistry as successor for the Tata Group, after a search that lasted almost two years, highlights the importance placed on succession planning by well-run corporates.

Small and Medium Enterprises (SMEs) also deserve the same degree of importance in succession planning and business continuity, but many entrepreneurs don't take serious note of it. SMEs have been considered as the engine of economic growth and for promoting equitable development. The major advantage of the sector is its employment potential at low capital cost. The labour intensity of the SME sector is much higher than that of the large enterprises. The sector is a nursery of entrepreneurship, often driven by individual creativity and innovation. It is noted that the SME sector is the main driving force behind job creation, poverty reduction, wealth creation, income distribution and reduction in income disparities. SME sector forms the vanguard of the modern enterprise sector and presents the propelling force of economic modernization and growth in the country (Aremu, 2004). Progressive entrepreneurs who take up succession planning face several challenges in this endeavour, many of which are unique to SMEs in India. The need for a well defined succession planning process is equally critical if not more in the context of SMEs. The reason, organizations are relatively flat and the personal stakes of the entrepreneur is significantly more. Not as much in absolute terms, but relative to the total wealth of the family. This could additionally be compounded by the fact that invariably the promoter would have extended personal guarantees in respect with/to corporate borrowings. Atwood (2007) stated that succession planning in the small and medium enterprises requires focus on the four key departments present in any business of any size: administration and finance, operations and customer fulfillment, sales and marketing.

## **LITERATURE REVIEW**

### **Family Business Defined**

The family-owned businesses are emerging as a dominant form of business organisations in and their numbers and impact, are expected to increase. The family business is characterized to make more consistent investment because its owners tend to be motivated by intangible factors more than tangible outputs such as profit and growth. They are not pressurised to show the brilliant profit each quarter, which is different from the firms in professional management. A factor that distinguishes FOBs from their non-FOBs is the presence of the "family" dimension in addition to the "business" dimension of the enterprise. Holland and Boulton (1984) defined family businesses as ones in which: (a) CEO of the firm was the entrepreneur/founder; (b) the business employed members of the entrepreneur/founder's family; and (c) managers within the firm perceived the company as a family business. Chua et al. (1999) defined family businesses in terms that the vision of the firm was (1) held and (2) pursued by a family or small group of families.

### **Succession Planning**

Several research studies provide comprehensive definitions of the term succession planning in family-owned businesses (Cliffe 1998, Handler 1989 and Manikutty 2000). Several researchers have developed theoretical models dealing with succession planning (Bjuggren et al. 2001, Harveston et al. 1997, Lauterbach et al. 1999 and Manikutty 2000). However, the main criticism with the suggested models is that there has been little effort to use existing theory to develop a comprehensive model of succession planning in family-owned businesses. A mixed set of results have been generated by empirical studies that have examined the relationship between firm size and the source of succession.

Lauterbach et al. (1999) concluded that large corporate family-owned firms in the U.S. prefer external succession than to internal succession. They also found that firm's performance can be improved through external succession. Helmich and Brown's (1972) study concluded that larger firms use more external recruiting than smaller firms. On the other hand, Dalton and Kesner (1983) study claimed the opposite, while Schwartz and Menon (1985) found no relation between the successor origin and firm size.

Handler (1991) argued that degree of training, degree of responsibility, experience outside the organization, as well as communication concerning succession and planning around succession influence the effectiveness of succession criteria.

A study by Morris et al. (1996) suggested three general factors associated with effective transitions. First, preparation of heirs in terms of formal education, training, work experience, motivation is essential. Secondly, relationships among family and business members include communication, commitment, trust, loyalty, conflict, shared values and traditions, jealousy. Thirdly, planning and control activities include succession planning and creation of family council. There are several issues associated with succession planning that need to be addressed. The questions of who, when and how the ownership of the firm will be transferred is directly related to the ownership aspect of succession planning, while the questions of what changes will it bring, when will they be accountable for results and how will results be realized are related with the issue of management. Succession planning can be unsuccessful if these two processes are not coordinated or addressed collectively (Lansberg 1999).

Bachkaniwala et al. (2001) reported that most founders educated their children in order to enhance their career prospects and not just for succession purposes. Motwani et al. (2006) discovered that in terms of skill requirements, decision-making ability of successor, the successors commitment to the business, and interpersonal skills emerged to be the top three successor attributes. However, the most common succession plan options are generational succession (Verry, 2008), selling the business (Sharma et al., 2003a) and management buy-out or management buy-in (Napoli, 2006).

Many small and medium-sized enterprise owners have built their businesses without giving much thought to what will happen when it is time to retire. Research shows that many small firms go out of existence after ten years and only three out of ten into a second generation (Zimmerer, Scarborough and Wilson, 2007). Significantly, only 12 - 16% of all family enterprises make it to a third generation and just only 3% make it to the fourth generation and beyond (Kuratko and Hodgetts, 1998; Zimmerer, Scarborough and Wilson, 2007). A study examined the life expectancy of 200 successful manufacturing firms indicating that the average life expectancy for a family business is 24 years, which is also the average tenure for the founders of a business (Kets de Vries, 1993; Beckkhard & Dyer, 1983). One of the major causes of SMEs' lack of continuity includes failure to prepare for the next generation through succession planning.

Without succession plan, SME may not be able to realise the value of their substantial capital which is tied up in the business (Wallace & Bellingham, 2008). Battisti and Massey's (2008) results indicated that only forty-seven per cent of New Zealand SME owners had an exit plan. Both family and non-family businesses provided similar reasons for not having an exit plan, such as prematurity or a lack of time to develop one. Because of SME owners' inability to find time to develop a SP, the complexity of the process, and the expected positive outcomes, it is suggested that these owners may need (professional) advice to engage in business succession planning.

## **PROBLEM OF SUCCESSION PLANNING**

The role of the SMEs as a catalyst for economic growth and development has been well documented in the economic literature and recognized in most countries. The sector contributes significantly to overall export earnings from then on traditional exports sector and creates jobs at relatively low capital cost. However, this important sector is bedevilled with succession planning on the retirement of the proprietor or after the demise of the founder. Statistics show that about 70 percent of SME businesses collapse because of lack of succession planning. Some of the questions bothering the mind of the researcher are what factors are responsible for lack of succession planning in small and medium enterprises and how these challenges can be addressed in SMEs? There is evidence that no research work has been done in the area of succession planning in SME in Jalandhar.

## OBJECTIVES OF THE STUDY

The prime objective of this study was to examine the extent of succession planning in small and medium scale enterprises in Jalandhar. The following specific objectives were proposed to help in achieving the general

- To examine the level of succession planning in SMEs.
- To investigate the reasons for lack of succession planning in SMEs.
- To analyse the factors considered while selecting a successor in SMEs.

## DATA BASE AND METHODOLOGY

### Data Base

This paper focuses on exploring the extent of succession planning in the SMEs. For accomplishing the objective, the survey was carried out through a non-disguised structured questionnaire having open-ended, close-ended, and dichotomous questions that was prepared in a multi-stage process. First, prior studies on succession planning were reviewed to identify its various facets along with the interrelationships that exist between various such facets. Secondly, based on the identified facets of succession planning, some factors were identified, on the basis of which questionnaire was framed, especially on lines of Terdpaopong and Farooque, 2013. Third, to ensure the content validity of the questionnaire, it was pretested in two stages. In stage one, three professors from the field of financial management and research studies evaluated the questionnaire. Based on their feedback, some modifications were made in the questionnaire. In stage two, a 'pilot survey' was conducted in case of ten respondents. After the pilot survey, certain modifications again were introduced in the questionnaire and finally modified questionnaire was used for the detailed study.

Finally, the questionnaire was sent to 50 SME manufacturing units operating in the state of Punjab. The SME manufacturing units were identified on the basis of non-probabilistic convenience sampling. The SME manufacturing units were chosen irrespective of the type of industry, that is, the sample constituted the sports good unit, hosiery units, hand tools and handloom units.

### Statistical Tools & Techniques

The present study had been analyzed by using percentages and statistical tool of Friedman ANOVA. The results and analysis had been shown with the help of tables. For analyzing the questionnaire, simple as well as cross tabulation has been used. In the present study, in order to apply various methodological tools, SPSS was used.

## RESULTS AND FINDINGS

In the present study, data has been analysed and interpreted in the following sub-heads:

### Description of the sample

The sample for the current study demonstrated the following demographics concerning type of enterprise, years of experience and growth stage of SME units.

**Table 1: Profile of the Survey Respondents**

Demographic Factors	Number of Respondents	Percentage of Respondents
<i>Age of the Company</i>		
Less than 10 years	7	14
10-20 years	13	13
20-30 years	24	42
More than 30 years	6	12
Total	50	100
<i>Type of Company</i>		
Small Scale Industry	30	60
Medium Scale Industry	20	40

Large Scale Industry	0	0
Total	50	100
<b>Industry Sector of Company</b>		
Sports Good Industry	10	20
Hand Tools Industry	13	26
Auto Parts Industry	5	10
Rubber Goods Industry	5	10
Surgical Instruments	3	6
Tanning Industry	0	0
Others	14	28
Total	50	100
<b>Stage of Company</b>		
Introduction Stage	9	18
Growth Stage	34	68
Maturity Stage	6	12
Decline Stage	1	2
Total	50	100
<b>Level of Investment</b>		
Less than 20 lakhs	21	42
20 lakhs – 40 lakhs	28	56
More than 40 lakhs	1	2
Total	50	100
<b>Number of Employees</b>		
Less than 100	21	42
100 – 200	18	36
More than 200	11	22
Total	50	100
<b>Annual Turnover</b>		
Less than 20 lakhs	14	28
20 lakhs – 40 lakhs	32	64
More than 40 lakhs	4	8
Total	50	100

Perusal of the above table reveals that of the total respondent SMEs, majority of the companies under study i.e., 42% are of age between 20 – 30 years, that majority of industries that is 60% are Small Scale Industries, that majority of the companies that is 26% are Hand Tool Industries, that majority of the companies are at Growth Stage, majority of the entrepreneurs made investment in their enterprises upto 20 lakhs – 40 lakhs, majority of the enterprises are having employees less than 100 and majority of the companies are having annual turnover between 20-40 lakhs.

### Understanding of Succession Planning

The study has been carried out to explore the level and the importance given to succession planning by respondent SMEs. In order to check the understanding of succession planning, this aspect has been included.

**Table 2: Understanding of Succession Planning**

Responses	Percentage
Yes	72.4
No	26.6

Scrutinizing the results in table 2 revealed that majority of the respondents that is 72.4% had a good understanding of the concept of succession planning and a mere 26.6% had no idea of the concept. A dialogue with the owners of these SMEs indicated, though they were well aware that there had to be a transfer of succession yet the planning part was missing.

#### **Mechanism of Succession Planning in the Organisation**

A further examination was made to analyse the existence of a mechanism of succession planning in the organisation.

**Table 3: Mechanism of Succession Planning in the Organisation**

Responses	Percentage
Yes	30.2
Formal	25.5
Informal	74.5
No	69.8

An analysis of the results of table 3 indicated that majority of respondents i.e., 69.8% of SME respondents did not have any mechanism to transfer the ownership and control of the organisation. Also the organisations that did have a procedure, for majority there was only an informal system of succession planning.

#### **Intention to have a succession planning in place in the near future**

Since majority of organisations did not have a mechanism for succession planning, another question was designed to analyse their intention to instate a procedure for succession planning in future.

**Table 4: Intention to have a succession planning in place in the near future**

Responses	Percentage
Yes	18.6
No	91.4

The perusal of the above table indicated the lack of intention of the SMEs to install a system to pass on the ownership and control of their organisation, with merely 18.6% of SMEs willing to have a system in future. The hard fact is that majority of SMEs did not realise the importance of succession planning and that businesses fail to survive after the change in ownership.

#### **Reasons for a lack of intention for planning a transfer of succession**

The astounding disinterest of the SMEs towards having a plan for succession transfer, made it imperative to analyse the reasons for the same.

**Table 5: Reasons for a lack of intention for planning a transfer of succession**

Reasons	Percentage
Need to wait for the right time	42.8
It is rather difficult and complicated	8.6
It is not important enough to have one	4.3
Afraid of having inner-problems in the business	18.3
Not sure who will be the successor	26.0

An examination of the results revealed three significant reasons mentioned in the order of importance: need to wait for the right time; not sure who will be the successor and afraid of having inner-problems in the business. Few also believed that it is rather difficult and complicated and it is not important enough to have one successor, defying the basic principles of unity of command and direction.

### Most significant reason for having a succession plan

For the organisation that had a clear plan, a connecting question was framed to examine the reason for having a plan in place.

**Table 6: Most significant reason for having a succession plan**

Reasons	Percentage
Aging/Health reasons	67.2
Expansion/ modernisation/change/innovation	22.3
Satisfy the management or partners	10.5
It is the business policy	0.0

The results indicated that the most important reason for planning for the transfer of succession was the aging/health reasons (67.2%), followed by expansion/modernisation/change/innovation (22.3%).

### Decision about the next Successor

For the organisation that had a clear plan, a connecting question was framed to examine their choice of successor.

**Table 7: Decision about the next Successor**

Next Successor	Percentage
Son or Daughter	68.8
Spouse	5.0
Brother or Sister or other relatives	15.9
Sell the business	0.0
Not sure	10.3

As expected, the results of the table clearly indicated that when it comes to transfer of family business, the first choice with a staggering majority of SMEs (68.8%) was their son/daughter, followed by a small proportion (15.9%) planning to transfer it to their brother or sister or other relatives.

### Criteria for Selection of Successor

In order to further investigate into the basis taken into consideration while selecting the next successor, the respondents were asked next question. The respondents were asked to rank according to the order of importance a list of factors ranging from experience, personal relations, appropriateness of successor's educational background, age, gender, decision-making ability of the successor, successor's commitment to the business, interpersonal skills of the successor and lastly tax considerations.

**Table 8: Criteria for selecting the Successor**

Reasons	Rank	Mean
Experience	1	1.66
Personal relationship	2	2.08
Age	3	2.38
Gender	4	3.67
Decision-making ability of the successor	5	4.16
Successor's commitment to the business	6	4.42
Interpersonal skills of the successor	7	4.53
Appropriateness of successor's educational background	8	5.82
Tax considerations	9	6.12

**Notes:** The mean is the average on a scale of 1=Most Important and 9= Least Important; SD=Standard Deviation; scores are significantly different on Friedman two-way ANOVA test ( $p<0.001$ ); N=100

The results in Table 8 show that the scores are significantly different on the Friedman two-way ANOVA test ( $p<0.001$ ). The most striking results were found where demographic related factors being more important than work related factors. Here the most important factor was *experience* (1.66), followed by *personal relations* (2.08), *age* (2.38) and *gender* (3.67). And the factors regarding *decision-making ability* (4.16), *commitment to work* (4.42), *interpersonal skills* (4.53), *educational background* (5.82) and *tax consideration* (6.12) were given least consideration.

### Successor involved in the business and willingness to run the business

In order to undertake a deeper analysis the respondents were asked to indicate whether the successor is currently involved in the business and also whether the successor is in fact willing to run the business.

**Table 9: Successor involved in the business and willingness to run the business**

Responses	Percentage	Responses	Percentage
Yes	50.0	Yes	32.4
No	50.0	No	9.4
		Not sure	58.2

The analysis of Table 10 indicated that for the almost half of the SME respondent, the successor was involved in the business. Also for 50% of SMEs, the future successor was not involved in the business currently yet he was chosen as the successor, probably based on personal relationships. Another surprising outcome was that 48.2 % of the respondents were not sure whether the successor is willing to pursue the business in future.

### Level of importance / necessity of having a succession plan

Lastly an overall opinion was gathered indicating the level of importance that SMEs attached to having a succession plan in place.

**Table 10: Level of importance / necessity of having a succession plan**

Level of importance	Percentage
Critical	16.2
Very Important	22.7
Important but can wait	39.5
Slightly Important	18.3
Unimportant	3.3

The respondents majorly opined that though succession planning is an important task, yet few were of the view that it can wait until the right time. And this would again mean no planning or preparation for transfer of succession.

### CONCLUSION

Succession planning is a long-term exercise — be it inducting the next generation early, identifying strong professional talent to run or scouting for exit opportunities — that deserves the serious attention of any entrepreneur who has aspirations of leaving a legacy of the business that he has built with passion.

### SIGNIFICANCE/IMPLICATIONS

Many owners of SMEs are either not aware of the problem of succession planning or simply avoid talking about it. This makes these businesses vulnerable to succumb when the founder or owner dies. Such lack of planning and reluctance may negatively affect the SME business as well as the larger economy. It is hoped that this research will provide a more profound and science-based understanding of the subject at hand and help solving one of the major problems facing the small and medium business community and make them realise the importance of succession planning in an organisation. The findings of the research will have a tremendous impact on SMEs in Jalandhar.

**REFERENCES**

- Atwood, I. S. (2007). Relationship influencers: Determination of affect in the provision of advisory services to SME Sector Firms. *Journal of European Industrial Training*, Vol. 22 No. 6, Pp. 249-567
- Bachkaniwala, D, Wright, M & Ram, M 2001, „Succession in South Asian Family Businesses in the UK“, *International Small Business Journal*, vol. 19, no. 4, pp. 15–27.
- Barach, J. and Ganitsky, J. (1995) Successful Succession in Family Business. *Family Business Review*, 8 (2): 131-155.
- Battisti, M. & Massey, C (2008). Succession planning In NZ SMEs: An exploratory study in Small Enterprise Association Of Australia And New Zealand (SEAANZ) Conference, Sydney
- Beckhard, R. and Dyer, Jr., W.G. (1983) Managing Continuity in the Family Owned Business. *Organizational Dynamics*, 24 (3): 5-12.
- Bjuggren, P. and Sund, L. (2001) Strategic Decision Making in Integration Successions of Small- and Medium-Size Family-Owned Business. *Family Business Review*, 14 (1):11- 21.
- Brochhaus, D. (2004), 'Succession choice', *Succeed Magazine*, P. 18
- Christensen, C. (1953) Management Succession in Small and Growing Enterprises. Boston: Division of Research, Harvard Business School.
- Chua, J.H., Chrisman, J.J. and Sharma, P. (1999, Summer) Defining the Family Business by Behavior. *Entrepreneurship Theory and Practice*, 23 (4): 19-39.
- Churchill, N. C. & Lewis, V. L. (1983). The five stages of small business growth, *Harvard Business Review*
- Dalton, D. and Kesner, L. (1983) Inside/Outside Succession and Organizational Size: The Pragmatics of Executive Replacement *Academy of Management Journal*, 26: 736-741.
- Davis, P. (1983) Realising the Potential of the Family Business *Organizational Dynamics*, 12 (1): 47-56.
- Davis, P.S. and Harveston, P.D. (2000, June). Internationalization and Organizational Growth: The Impact of Internet Usage and Technology Involvement Among Entrepreneur-Led Family Business. *Family Business Review*, 13 (2): 107-120.
- Dyer, Jr., W.G. (1986) Cultural change in family firms: Anticipating and managing business and family transitions. San Francisco: Jossey Bass.
- Fox, M., Nilakant, V. and Hamilton, R. (1996) Managing Succession in Family Business. *International Small Business Journal*, 15 (1): 15-25.
- Handler, W. (1989) Succession in Family Business: A Review of the Research. *Family Business Review*, 2 (3): 133-157.
- Handler, WC 1991, „Key Interpersonal Relationships of Next-generation Family Members in Family Firms“, *Journal of Small Business Management*, vol. 29, no. 3, pp. 21–32.
- Harveston, P., Davis, P. and Lyden, J. (1997) Succession Planning in Family Business: The Impact of the Owner Gender *Family Business Review*, 10 (4): 373-396.
- Helmich, D. and Brown, W. (1972) Successor Type and Organizational Change in the Corporate Enterprise. *Administrative Science Quarterly*, 17: 371-381.
- Holland, P.G. and Boulton, W.R. (1984, March/April) Balancing the Family and the Business in Family Business. *Business Horizons*: 16-21.
- Huang, T. (1999). Who Shall Follow? Factors Affecting the Adoption of Succession Plans in Taiwan. *Long Range Planning*, 32(6), 609-616.
- Hufft, Jr., E.M. (1999) Growth of Family Businesses and Small Firms. *Proceedings of the 1999 Conference of the United States Association for Small Business and Entrepreneurship (USASBE)*. Available online at: <http://www.usasbe.org/conferences/1999/99%20papers/hufft.pdf>
- Kanitsorn, T. and Omar A. F. (2013). Intergenerational Succession of Thai Small and Medium-Sized



Family-Owned Businesses. Small Enterprise Association of Australia and New Zealand, 26th Annual SEAANZ Conference Proceedings, 11-12 Sydney 2013.

- Kets de Vries, M.F.R (Winter 1993). The Dynamics of Family-Controlled Firms: The Good News and the Bad News. *Organizational Dynamics*, 59-71.
- Kuratko, D.F. & Hodgetts, R.M. (1998). *Entrepreneurship: A Contemporary Approach*, 4th ed. New York: Dryden Press.
- Lansberg, I 1988, The Succession Conspiracy, *Family Business Review*, vol. 1, no. 2, pp. 119-143.
- Lansberg, I. (1983) Managing Human Resources in Family Firms: The Problem of Institutional Overlap. *Organizational Dynamics*, 12 (1): 39-46.
- Lauterbach, B., Vu, J. and Weisberg, J. (1999) Internal vs External Succession and Their Effect on Firm Performance. *Human Relations*, 52 (12): 1485-1504.
- Leon-Guerrero, A.Y., McCann III, J.E. and Haley, Jr., J.D. (1998) A Study of Practice Utilization in Family Businesses. *Family Business Review*, 11 (2), 107-120.
- Manikutty, S. (2000) Family Business Groups in India: A Resource Based View of the Emerging Trends. *Family Business Review*, 13 (4): 279-292.
- Cliffe, S. (1998) Family Business: Facing up to Succession. *Harvard Business Review*, 76 (3): 16-17.
- Maynard, R. (1999) Family Ties. *Builder*, 22 (14): 106-112.
- Morris, M. H., Williams, R. W., & Nel, D. (1996) Factors Influencing Family Business Succession. *International Journal of Entrepreneurial Behaviour & Research*, Vol. 2 No. 3, pp. 68-81.
- Morris, M.H., Williams, R.W., Allen, J.A. & Avila, R.A. (1997), "Correlates of success in family business transitions", *Journal of Business Venturing*, Vol. 12, Pp. 385-401
- Motwani, J, Levenburg, NM, Schwarz, TV & Blankson, C 2006, „Succession Planning in SMEs“, *International Small Business Journal*, vol. 24, no. 5, pp. 471–495.
- Napoli, R. (2006), 'Selling out', *CA Magazine*, Pp. 43-48
- Rue, L.W. and Ibrahim, N.A. (1996) The Status of Planning in Smaller Family-Owned Business. *Family Business Review*, 9 (1): 29-43.
- Schwartz, K. and Menon, K. (1985) Executive Succession in Family Firms. *Academy of Management Journal*, 28: 680-686.
- Sharma, P., Chrisman, J.J. & Chua, J. (2003a), "Predictors of satisfaction with the succession process in family firms", *Journal Of Business Venturing*, Vol. 18, Pp. 667-687
- Verry, D. (2008), 'Succession choice', *Succeed Magazine*, P. 18
- Wallace, A. & Bellingham, M. (2008), 'Succession planning for your business.' in professional development course papers, New Zealand Institute Of Chartered Accountants, Wellington
- Ward, J. (2000) Reflections on Indian Family Business Groups. *Family Business Review*, 13 (4): 271-278.
- Ward, J.L. (1987) Keeping the family business healthy: How to plan for continuing growth, profitability, and family leadership. San Francisco: Jossey-Bass.
- Zimmerer, T. M., Scarborough, N.M. and Wilson, D. ( 2007). *Essentials of Entrepreneurship*. New Jersey: Pearson Prentice Hall.

## A STUDY ON INVESTORS PREFERENCES TOWARDS VARIOUS INVESTMENT AVENUES IN CAPITAL MARKET WITH SPECIAL REFERENCE TO DERIVATIVES

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### ABSTRACT

*In India, generally all capital market investment avenues are perceived to be risky by the investors. But the younger generation investors are willing to invest in capital market instruments and that too very highly in Derivatives segment. Even though the knowledge to the investors in the Derivative segment is not adequate, they tend to take decisions with the help of the brokers or through their friends and were trying to invest in this market. This study was undertaken to find out the awareness level of various capital market instruments and also to find out their risk preference in various segments. This Study Intends 1) to find out the preference level of investors on various Capital Market instruments 2) to find out the type of risk which are considered by the investors 3) to find out the ways through which the investors on various minimizes their risk 4) to find out the preferences of Investors in derivatives market. About 100 samples were collected from Chennai city from various investors through a structured questionnaire and awareness about derivatives and the investor risk preference in an elaborate way.*

### INTRODUCTION

In India, generally all capital market investment avenues are perceived to be risky by the investors. But the younger generation investors are willing to invest in capital market instruments and that too very highly in Derivatives segment. Even though the knowledge to the investors in the Derivative segment is not adequate, they tend to take decisions with the help of the brokers or through their friends and were trying to invest in this market. This study was undertaken to find out the awareness level of various capital market instruments and also to find out their risk preference in various segments.

### NEED FOR THE STUDY

- To educate investors who are risk averse for trade in derivatives
- Awareness about the various uses of derivatives can help investors to reduce the risk and minimize the losses

### OVERVIEW OF THE STUDY

Derivatives have fundamentally changed financial management by providing new tool to manage risk. What makes derivatives important is not so much the size of the activity, as the role it plays in fostering new ways to understand,

measure and manages risk. Through derivatives the complex risks that are bound together in traditional instruments can be teased apart and managed independently and often more efficiently. A remarkable growth in the derivatives markets has caused many consequences on the players associated with them. Some got advantages out of it; other became victims of the adverse results of investing in it.

Derivative securities have been recently blamed as culprits for huge financial losses at firms like Gibson, P & G, Barring etc. they are sometimes viewed as bad because, they are complex instruments, highly leveraged and difficult to understand. The development of derivatives has occurred in response to a search for higher yields and lowers funding costs and demand for tools to manage risk.

### DEFINITION

Derivatives may be defined as “A security or contract designed in such a way that its price is derived from the price of an underlying asset”.

The price of the derivative security is not arbitrary. It is linked to the price of underlying asset. Changes in the price of underlying asset affect the price of derivative security. A true derivative instrument requires no movement of principal funds. It is this characteristic that makes them such useful tool to hedge and to take risk. Another definition explains derivatives, as “Derivatives are financial instruments whose returns are derived from those of other financial instruments”

Their performance depends on how other instruments perform.

**FACTORS AFFECTING GROWTH OF DERIVATIVES:**

Growths of derivatives are affected by a number of factors. Some of the important factors are stated below.

1. Increased volatility in asset prices in financial markets.
2. Increased integration of national financial markets with the international markets.
3. Marked improvement in communication facilities and sharp decline in their costs.
4. Development of more sophisticated risk management tools, providing economic agents, a wider choice of risk management strategies.
5. Innovation in the derivative markets, which optimally combine the risk and returns, reduced risks as well as transactions costs as compared to individual financial assets.

**EVOLUTION OF DERIVATIVES****1) Forward Trading :**

It is not clearly established when and where the first forward market came into existence. There are reports that forward trade existed in India as far back as 2000BC and in Roman times. Forward trading is believed to have been in existence in the 12<sup>th</sup> century English and French fairs. There was forward trade in rice in the 17<sup>th</sup> century in Japan. The first organized forward market came into existence in late 19<sup>th</sup> and early 20<sup>th</sup> century in Kolkatta (jute & jute goods) and in Mumbai (cotton).

**2) Futures Trading**

The Dojima rice market can be considered as the first future market in the sense of an organized exchange. The first futures in the western hemisphere were developed in United States in Chicago. First they were started as spot markets and gradually evolved into futures trading. First stage was starting of agreements to buy grain in future at a predetermined price with the intention of actual delivery. Gradually these contracts became transferable and during American civil war, it became commonplace to sell and resell agreements instead of taking delivery of physical produce. Traders Found that the agreements were easier to buy and sell. This is how modern futures contracts came into being.

**3) Options Trading**

Options trading are of more recent origin. It is estimated that they existed in Greece and Rome as early as 400 BC. Options trading in agriculture products and shares came in US from the 1860s. The first options market was started by Chicago BOARD OF trade (CBOT) in 1973. Standard maturities, standard strike prices, standard delivery arrangements were evolved. The risk of default was removed by introducing a clearinghouse and margin system. The introduction of traded options opened the way for the evolution of more complex derivatives.

**4) SWAP Trading**

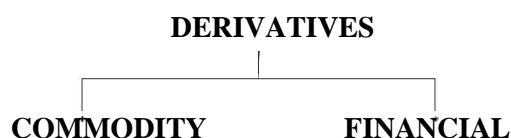
The first SWAP transaction took place between World Bank and IBM (International business machine). They were currency Swaps. Interest rates swaps also commenced in 1981.

**5) Other Derivatives**

Other derivatives like Forward Rate Agreements (FRAs), Range forwards, Collars evolved in second half of 1980s.

**TYPES OF DERIVATIVES**

One way of classifying derivatives is as,

**Commodity Derivatives**

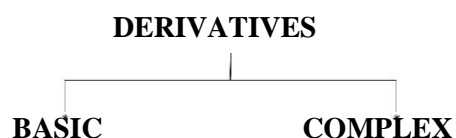
These deals with commodities like sugar, gold, wheat, pepper etc. thus, futures or options on gold, sugar, pepper, jute etc are commodity derivatives.

**Financial Derivatives**

Futures or options or Swaps on currencies, gilt edged securities, stocks and shares, stock market indices, cost of

living indices etc are financial derivatives.

Another way of classifying Derivative is.

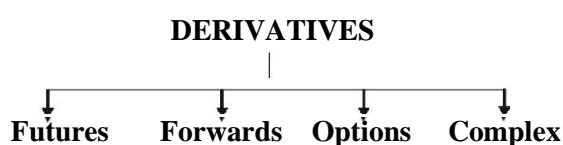


### **Basic Derivatives**

They are forward / futures contracts and option contracts.

### **Complex Derivatives**

Other derivatives, such as SWAPS are complex ones because they are built up from either forward / future contracts or options contracts or both. Generally derivatives can be classified as follows:



### **Futures**

A futures contract is a contract to “buy or sell a standard amount of or predetermined grades of certain commodity (i.e. commodity futures) or financial instruments or currency (that is financial futures) on a predetermined future day at an agreed prize.”

### **Forwards**

It is “an agreement between two parties to buy or sell a commodity or financial instrument at a predetermined future date at a prize agreed when the contract is a made”. The forward contracts are normally traded outside the exchanges. Forward contracts are very useful in hedging and speculation.

### **Options**

They are the second, most important group of derivative securities, first being futures. It is “a contract between two parties where by one party acquires the right, but not the obligation to buy or sell a particular commodity or financial instrument at a specified date”. Options are of two types

(a) Call option (b) Put option

**Call Option:** Call option gives the holder the right but not the obligation to buy an asset by a certain date for a certain price.

**Put Option:** Put option gives the holder the right but not the obligation to sell an asset by a certain date for a certain price.

### **Complex Derivatives**

Using futures and options it is possible to build number of complex derivatives. IT is designed to suit the particular needs and circumstances of a client

**Example:** SWAPS, Credit Derivatives

### **Weather Derivatives**

This is a new tool for risk management. This is a contract between 2 parties that stipulate how payment will be exchanged between parties depending on certain meteorological conditions during the contract period. They are based on data such as temperature, rainfall, snowfall etc. The primary objective of this derivative is to initiate the volume risks, which will influence the Balance Sheet and Profit and Loss figures.

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## FUNCTIONS OF DERIVATIVES

**Risk Management:** It involves structuring of financial contracts to produce gains or losses that counter balances the losses or gains arising from movements in financial prices. Thus risks are reduced and profit is increased of a financial enterprises.

**Price Discovery:** This represents the ability to achieve and disseminate price information without price information investors; consumers and producers cannot make decisions. Derivatives are well suited for providing price information.

**Transactional Efficiency:** Transactional efficiency is the product of liquidity. Inadequate liquidity results in high transaction costs. This increases investment and causes accumulation of capital. Derivatives increases market liquidity, as a result transactional costs are lowered, and the efficiency in doing business is increased.

## RISK OF DERIVATIVES

Any comment about derivative would be inadequate without a word of caution. There are 4 inherent risks associated with derivatives. These risks should be clearly understood before establishing position in derivatives market.

- a. **Credit Risk:** The exposure to the possibility of loss resulting from a counter party's failure to meet its financial obligation.
- b. **Market Risk:** Adverse movements in the price of financial asset or commodity.
- c. **Legal Risk:** An action by a court or by a regulatory body that could invalidate a financial contract.
- d. **Operations Risk:** Inadequate Controls, Human error system failure of fraud.

## REVIEW OF LITERATURE

**“Investment property portfolio management and financial derivatives”** by Patrick McAllister, John R. Mansfield. His study on Derivatives has been an expanding and controversial feature of the financial markets since the late 1980s. They are used by a wide range of manufacturers and investors to manage risk. This paper analyses the role and potential of financial derivatives investment property portfolio management. The limitations and problems of direct investment in commercial property are briefly discussed and the main principles and types of derivatives are analyzed and explained. The potential of financial derivatives to mitigate many of the problems associated with direct property investment is examined.

**“Derivatives, risk and regulation: chaos or confidence?”** by R. Dixon, R.K. Bhandari said that there has been an extraordinary increase in the use of financial derivatives in the capital markets. Consequently derivative instruments can have a significant impact on financial institutions, individual investors and even national economies. This relatively recent change in the status of derivatives has led to calls for regulation. Using derivatives to hedge against risk carries in itself a new risk was brought sharply into focus by the collapse of Barings Bank in 1995. The principal concerns of regulators about how legislation may meet those concerns are the subject of current debate between the finance industry and the regulators. Recommendations have been made and reviewed by some of the key players in the capital markets at national and global levels. There is a clear call for international harmonization and its recognition by both traders and regulators. There are calls also for a new international body to be set up to ensure that derivatives, while remaining an effective tool of risk management, carry a minimum risk to investors, institutions and national/global economies. Having reviewed derivatives and how they work, proceeds to examine regulation. Finds that calls for regulation through increased legislation are not universally welcome, whereas the regulators' main concern is that the stability of international markets could be severely undermined without greater regulation. Considers the expanding role of banks and securities houses in the light of their sharp reactions to increases in interest rates and the effect their presence in the derivatives market may have on market volatility. Includes the reaction of some 30 dealers and users to the recommendations of the G-30 report and looks at some key factors in overcoming potential market volatility.

**“Management's disclosure of hedging activity: An empirical investigation of analysts and investors reactions”** by Jennifer Reynolds-Moehrle. This study aims to examine how market participants changed the way they process earnings information after learning of the implementation of hedging activities.

**Design/methodology/approach** – Using a sample of derivative user and non-user firms, this study empirically compares earnings predictability, forecast revision behavior, and the earnings response coefficients before and after the disclosure of hedging activity.

**Findings** – The findings indicate that analysts' forecast accuracy increased and that unexpected earnings were incorporated into subsequent earnings forecasts to a greater extent subsequent to disclosure of sustained hedging activity. Additionally, the findings indicate an increase in the earnings-return relation in the hedging activity period.

### **RESEARCH LIMITATIONS/IMPLICATIONS**

This evidence empirically supports the claim that, when a company communicates that hedging activities have been started, market participants are better able to forecast earnings and view subsequent earnings announcements as providing greater information about future earnings. The results may be understated due to the minimal disclosures required during the sample period. Future research could revisit these tests for the SFAS 133 time period as a way of evaluating the usefulness of more detailed disclosures.

**Practical implications** – The models used in the tests of forecast revisions and earnings response coefficients could easily be adapted to other settings where the research question compares different time periods.

**Originality/value** – This study adds to the empirical evidence regarding the effects of hedging activity by providing direct evidence of analysts' use of and investors' reactions to earnings surprises following the disclosure of the implementation of hedging activities

### **OBJECTIVES OF THE STUDY**

#### **PRIMARY OBJECTIVE**

To Study the various investment avenues and the investors risk preference towards it.

#### **SECONDRY OBJECTIVES**

- To find out the general demographic factors of the investors dealing in capital market.
- To find out the preference level of investors on various Capital Market instruments.
- To find out the type of risk which are considered by the investors
- To find out the ways through which the investors minimizes their risk
- To find out the preferences of Investors in derivatives market.

### **RESEARCH METHODOLOGY**

#### **Research Design**

A Research design is purely and simply the framework of plan for a study that guides the collection and analysis of data. The study is intended to find the investors preference towards cash market and derivatives. The study design is descriptive in nature.

#### **TYPE OF RESEARCH**

#### **DESCRIPTIVE RESEARCH**

Descriptive study is a fact-finding investigation with adequate interpretation. It is the simplest type of research and is more specific. Mainly designed to gather descriptive information and provides information for formulating more sophisticated studies.

#### **Sampling Design**

1. **Selection of study area** : The study area is in Bangalore.
2. **Selection of the sample size** : 100

#### **Sampling Methods**

Convenience method of sampling is used to collect the data from the respondents. Researchers or field workers have the freedom to choose whomever they find, thus the name "convenience". About 100 samples were

collected from Chennai city and most of the respondents were customers coming in to stock broker's office and certain addresses were collected from reputed brokers. **Formulation of the questionnaire**

**Data collection**

- (a) Primary data – collected through Structured Questionnaire.
- (b) Secondary data – Earlier records from journals, magazines and other sources.

**Tools used for analysis****Percentage analysis**

- 1. Chi-square test
- 2. ANOVA
- 3. Correlation Analysis
- 4. Multiple Response Table

**LIMITATIONS OF THE STUDY**

Understanding the nature of the risk is not adequate unless the investor or analyst is capable of expressing it in some quantitative terms. Expressing the risk of a stock in quantitative terms makes it comparable with other stocks.

Measurement cannot be assured of cent percent accuracy because risk is caused by numerous factors such as social, political, economic and managerial efficiency.

Time was a limiting factor.

Only those investors who deal in capital markets are considered.

Respondent's bias was another limiting factor.

**SUMMARY OF FINDINGS**

- 1. Most of the respondents (44%) are of the age group 31-40.
- 2. Majority of the respondents (65%) are male.
- 3. Most of the respondents (38%) are graduates followed by Post graduates.
- 4. Most of the respondents (29%) are entrepreneurs and Working Executives.
- 5. Most of the respondents (38%) are having an Income level of 1- 5lacs followed by respondents having income level 5-10 lacks.
- 6. Most of the respondents (40%) are influenced by friends and relatives followed by brokers.  
Most of them (29% ) are highly favorable towards the cash market.
- 7. Most of them (30% ) are highly favorable towards the Futures market.
- 8. Most of them (26%) are favorable towards the Options market.
- 9. Most of them (30%) stayed neutral towards the Commodities market.
- 10. Majority of the respondents (37%) wanted to invest in short term funds followed by both short term and long term funds.
- 12. Majority of the respondents (36%) preferred wealth maximization instruments followed by steady growth instruments.
- 13. Most of them (43%) invested about 5-10% of their income on investments and only 9% invested more than 20% of their income on investments.
- 14. Respondents perceived that Market Risk and Credit risk are the two major risk observed in capital markets.
- 15. Most of the respondents (49%) said that News Papers and Financial Experts help them to minimize their risk.
- 16. Most of the respondents (63%) said that high Margin charged was their main barrier while dealing in Derivatives market.
- 17. In Derivatives market, Most of the respondents (29%) preferred to invest in Stock Index futures, followed

by stock index option and futures on individual stocks.

18. Most of them (37%) felt that derivatives market is growing very slowly.
21. From Chi-Square test it is found that, the risk factor is highly considered in the financial market.
22. From Kendall's W test, it is found that there is no difference of opinion towards their preference in financial market.
23. From Correlation test, it is found that there exist a positive correlation between the percentage of income for investment in financial market and the margin investment in derivative market.
24. From Correlation test , it is found there exist a negative correlation between the income percentage on investment and the participation in derivative market
25. From One Way ANOVA it is found that there is significant difference between the annual income and the income percentage towards investment.
26. From the Multiple Response test, it is found that the investors who invest around 5-10% of their investment mostly considers the market risk(18%) as the major risk which prevails in the market.
27. From the Multiple Response test, it is found that the investors whose investment is around 10% of their income, consider that the affordable margin amount for investment in Derivatives is up to Rs10000/-.

#### **SUGGESTIONS & RECOMMENDATIONS**

- 1) From the demographic factors it is found most of the investors are of age 31-40 and are mostly entrepreneurs & working executives, so the institutions dealing in capital market can take these factors and develop suitable marketing activities for them and attract them to invest more in capital markets.
- 2) Also it is found that the friends and relatives followed by brokers are the most influential persons to pull the investors into the capital market. So the Institutions should develop some referral programs and rewards for referrals, so that the existing investors can actively bring in more number of investors. Also brokers should be duly acknowledged.
- 3) Most of the respondents should positive sign in investing into Derivatives market, since most of them preferred short term investments and instruments leading to wealth maximization. So the Institutions dealing in Derivative market must develop products which suit the above said requirements of the investor.
- 4) It is also found that the investors are investing up to 10% of their income on various investments and also they said that the market risk and the credit risk are the two main parameters they look in to before investing. So the Institutions should develop products which are of less market risk and the credibility of the institution should be briefly explained to the investors.
- 5) Most of them felt that they want to reduce their market risk and they also said that they follow the ideas given by the financial experts and tips given in the news paper to reduce their risk. So the institutions should keep informed about their institutions developments to these groups by which it can reach the investors in a positive way.
- 6) Investors felt that high margin in derivative segment was the main barrier for investing, so the Institutions should work on this to reduce the margin.
- 7) In Derivatives market, most of the investors prefer stock index futures, followed by stock index options, so the institutions should develop more number of above said products by which it can attract more number of investors.

#### **CONCLUSION**

In the current scenario, investing in stock markets is a major challenge ever for professionals. Derivatives acts as a major tool for reducing the risk involved in investing in stock markets for getting the best results out of it. The investors should be aware of the various hedging and speculation strategies, which can be used for reducing their risk. Awareness about the various uses of derivatives can help investors to reduce risk and increase profits. Though the stock market is subjected to high risk, by using derivatives the loss can be minimized to an extent.



## REFERENCES:

- Marketing Research by G C Beri- third edition, Tata McGraw-Hill Publishing Company Ltd.
- Marketing Research by Rajendra Nargundkar-, Tata McGraw-Hill Publishing Company Ltd.
- Options, Futures & Derivatives – 6<sup>th</sup> Edition , John C. Hull
- Introduction to Future & Options – Franklin R Edward, Tata McGraw-Hill
- Futures & Options – T.V Somathan , Margam Publications,
- www.indiabulls.com
- www.nseindia.com
- www.stockedge.com

## IMPORTANT TABLE REFERENCES

### Influencer

Influencer	No. of Respondents	Percent
brokers	36	36
Friends & relatives	40	40
Advertisement	9	9
Banks	15	15
<b>Total</b>	<b>100</b>	<b>100.00</b>

### Perception towards Capital Market Instruments

Statement	Cash Market	Option Market	Commodities Market	Future Market
Highly favorable	29	20	27	30
Favorable	28	26	18	24
Neutral	27	26	30	18
Unfavorable	9	18	17	18
Highly Unfavorable	7	10	8	10
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

### Basis of overcoming risk

Basis of overcoming risk	No. of Respondents	Percent
Financial experts	24	24.0
Newspaper	49	49.0
Friends	18	18.0
Others	9	9.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

### Investment options in derivatives

Investment options in derivatives	No. of Respondents	Percent
Index futures	29	29
Index Options	27	27
On Individual Stock	26	26
On Group Stock	18	18
<b>Total</b>	<b>100</b>	<b>100</b>

### Perception towards derivative trading in India

Perception of Investors	Frequency	Percent
Grow very fast	17	17.0
Grow moderately	37	37.0
Grow slowly	37	37.0
cant say anything	9	9.0
<b>Total</b>	<b>100</b>	<b>100</b>

## PARADIGM OF VIRAL MARKETING

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### ABSTRACT

*The rapid diffusion of the Internet and the emergence of various social constructs facilitated by Internet technologies are changing the drivers that define how marketing techniques are developed and refined. This paper identifies critical factors for viral marketing, an Internet-based 'word-of-mouth' marketing Technique. Many viral marketing techniques are being used to target consumers, however it has been concluded that not all techniques are being utilized in an effective way on the Internet. The general attitude towards viral marketing, from the point of view of consumers, is that the information provided in viral marketing campaigns, is useful for making purchasing decisions. Consumers of today use the internet as a tool to communicate, do shopping and search for information. Hence, the internet has become a convenient way for organizations to reach out to consumers in an easy and cheap way, especially through the tool viral marketing. The first section is a literature review that presents a summary of findings of all key aspects of viral marketing ever since it emerged to the scene. The latter section contains the findings of a series of interviews conducted with viral marketing professionals from advertising agencies and companies. The findings show that any marketing communications message has the potential to go viral provided that the social object it contains is audience relevant and that the proper viral mechanics are in place. Three types of content are identified which increase the likelihood of a marketing communications message going viral and those include: entertainment, positive messages and interactive content. Furthermore, the findings show that the role of virality within integrated marketing communications remains primarily associated with short-term marketing objectives such as sales, raising awareness etc. however not exclusively so, depending on the type of content of the campaign in question.*

*Keywords: Internet, viral marketing, integrated marketing communications.*

### INTRODUCTION

With consumers showing increasing resistance to traditional forms of advertising such as TV or newspaper ads, marketers have turned to alternate strategies, including viral marketing. Viral marketing exploits existing social networks by encouraging customers to share product information with their friends. While the underlying principle of word-of-mouth marketing is well-established and acknowledged (Richins, 1983; Wilson, 1991), the Internet fosters new marketing strategies (Achrol and Kotler, 1999; Arnott and Bridgewater, 2002), one of which is viral marketing.

Viral marketing is of importance for brand awareness and to make the consumers aware of the product. This brand awareness is, together with brand image and brand association, the most essential part of brand equity, which relates to the advertising of a product or service (Keller, 1993; Leone *et al.*, 2006). Without awareness of a brand, it will be hard for the customer to recognize and relate to the product or service and react to possible adverts.

The growth in number of internet users has been dramatic ever since this platform came to existence. According to internetworldstats.com, European countries lead with highest internet penetration levels, with Scandinavian and Benelux countries topping the chart (Finland – 85, 3 % of population). A lot has been said and written about how this has affected our everyday lives, interpersonal relationships and how we go about conducting business in the digital era. However this research paper will focus on the marketing side of the story. In particular on how an old concept of word-of-mouth has evolved with the influence of the internet into something we call *viral marketing* today. A lot has been said and written about how this has affected our everyday lives, interpersonal relationships and how we go about conducting business in the digital era. However this research paper will focus on the marketing side of the story. In particular on how an old concept of word-of-mouth has evolved with the influence of the internet into something we call *viral marketing* today.

Viral marketing is one of the buzzwords that have been present in the realm of marketing for slightly more than a decade, yet there is not much written about it and that which is written is frequently incoherent – the definitions proposed to this date share the notion that viral marketing is a consumer-to-consumer process, and that it is related to word-of-mouth communication, however they differ in all other aspects (Vilpponen *et al.* 2006).

## **ORIGINS OF VIRAL MARKETING**

**Viral marketing, viral advertising, or marketing buzz** are buzzwords referring to marketing techniques that use pre-existing social networking services and other technologies to produce increases in brand awareness or to achieve other marketing objectives (such as product sales) through self-replicating viral processes, analogous to the spread of viruses or computer viruses (cf. Internet memes and meme tics). It can be delivered by word of mouth or enhanced by the network effects of the Internet and mobile networks. Viral marketing may take the form of video clips, interactive Flash games, advergames, eBooks, brand able software, images, text messages, email messages, or web pages. The most commonly utilized transmission vehicles for viral messages include: pass-along based, incentive based, trendy based, and undercover based. However, the creative nature of viral marketing enables an "endless amount of potential forms and vehicles the messages can utilize for transmission", including mobile devices. The ultimate goal of marketers interested in creating successful viral marketing programs is to create viral messages that appeal to individuals with high social networking potential (SNP) and that have a high probability of being presented and spread by these individuals and their competitors in their communications with others in a short period of time. The term "VRL marketing" has also been used pejoratively to refer to stealth marketing campaigns—the unscrupulous use of astroturfing online combined with under market advertising in shopping centers to create the impression of spontaneous word of mouth enthusiasm.

Word-of-mouth is an old concept in marketing and it refers to a form of interpersonal communication among consumers concerning their personal experiences with a firm or a product (Richins, 1984). It is a complex phenomenon and generally not something that can be controlled directly (Allsop *et al.* 2007). Nevertheless it is of great importance to organizations as it is a thousand times as powerful as conventional marketing by the measure of sales figures and purchase decision time (Silverman, 2001). Pruden and Vavra (2004) state that word-of-mouth is the highest ranked technique used by consumers to not only gather information but also to make purchase decisions. Word-of-mouth has greater influence on consumer behavior than print ads, personal selling, and radio advertising in certain circumstances (Engel et al. 1969) due to the perceived objectivity and credibility associated with the parties involved (Cruz and Fill, 2008).

Klopper and Montgomery equate word-of mouth with viral marketing by saying that viral marketing is just another buzzword for an already defined concept, called word-of-mouth (WOM). There is some disagreement in the existing literature when it comes to the question whether word-of-mouth and viral marketing are the same or essentially different concepts. (Klopper, 2001) and, furthermore, claim that viral marketing has been described in the marketing literature for more than 30 years but termed word-of-mouth or the diffusion of innovation (Montgomery, 2000). Most other authors however, focus on the differences i.e. the progression from word-of-mouth to viral marketing. Granitz and Ward (1996), in their research on Usenet participants' comments, found that viral marketing primarily differs from word-of-mouth in that WOM is spoken while viral marketing is written. In other words, the possible anonymity of viral marketing message forwarder allows for more truthful communication, devoid of any boundaries. However, this was no longer the case with the emergence of social media and individuals shedding their anonymity on the internet.

Another major difference between the concepts is the strength of the social ties (see Brown and Reingen, 1987; Granovetter, 1973; Krishnamurthy, 2001). Brown and Reingen (1987) describe these ties to be strong when the social group members are familiar and willing to share with one another. Conversely, weak ties are when these relationships are superficial and do not include openness and willingness to share. According to Granovetter (1973), weak ties play a crucial role in word-of-mouth message dissemination as they enable a message to travel *between* the social groups, thus amplifying the reach.

Based on the views presented above, it is safe to conclude that viral marketing is indeed an evolved form of word-of-mouth - its digital progression. The primary difference is the platform on which the message is contained which enables it to travel fast and reach far. Besides the amplified reach, the character of the content has evolved as well in the sense that the message can now be in various forms including text, images, sounds, videos, games etc. The message no longer has to be a result of an experience between a consumer and a brand, intense enough to motivate the consumer to spread the message – a much more superficial experience, and not necessarily related to the brand, is enough to motivate the consumer to pass the message along (for more, see Eckler and Bolls, 2011; Brown et al. 2010).

## **VIRALITY DEFINED**

The term *viral marketing* was coined by Steve Juvertson and Tim Draper in 1997 to describe the manner in which free e-mail service called *hotmail* was promoted. Namely, the signature line of every e-mail message sent through *hotmail*, the first online free e-mail agent, contained an invitation to create a free *hotmail.com* account. This method of promotion was understood to be *viral* in character as the message was being passed on by users

themselves, thereby *contaminating* one another with this virus. The word *viral* obviously stems from the word *virus*, symbolizing the manner in which the message spreads, without the negative connotation of the word. Marketers soon saw the potential benefits of this form of marketing communication and today, 14 years later, there is a variety of viral marketing success stories, books, academic articles, research projects and even agencies specializing in viral marketing.

Various terms have been used to describe this form of communication including: viral marketing (Juvertson, 1997), buzz marketing (Thomas, 2004), word-of-mouth (Goldenberg ET al.2001), viral stealth marketing (Swanepoel et al.2009), referral marketing (De Bruyn and Lilien, 2004), viral advertising (Porter and Golan, 2006) etc. While most authors agree that all these synonyms refer to the same concept, they do not necessarily agree on the key element of it, namely *virality*, or the way in which the message spreads. Cruz and Fill (2008) claim that 'viral marketing communication concerns the informal, peer-to-peer electronic exchange of information about an identifiable product or service'. Furthermore, they suggest that viral marketing is not another form of advertising, therefore the distribution of a message should not be controlled by financial means. This is in line with the definition proposed by Phelps et al.(2004) who alienate viral marketing from advertising and describe it as 'the process of encouraging honest communication among consumer networks'. Another view coherent with these is that of De Bruyn and Lilien (2004) who assert that the 'goal of electronic referral marketing is to use consumer-to-consumer (or peer-to-peer) communications, as opposed to company-to-consumer communications, to disseminate information about a product or a service, hence leading to its rapid and cost-effective market adoption.'

Wilson (2000) proposes a compromising view by stating that viral marketing is 'any strategy that encourages individuals to pass on a marketing message to others, creating the potential for exponential growth in the message's exposure and influence'. Another compromising view is that of Watts and Peretti (2007) who introduce the *big-seed* marketing 'which combines viral marketing tools with old-fashioned mass media in a way that yields far more predictable results than 'purely' viral approaches like word-of-mouth marketing'. They suggest that marketers create and launch multiple viral initiatives simultaneously thereby increasing the chance that at least one of them *catches on* and spreads like a virus instead of relying on the content of just one campaign to generate the desired results.

### **TRADITIONAL 'WORD OF MOUTH' MARKETING AND VIRAL MARKING**

Word of mouth implies that informal, *ad hoc* communication between individuals concerning products and services (Bayus, 1985) is taking place. This communication can be positive as well as negative, depending on the satisfaction levels of the individuals (Evans et al, 2006). In comparison to other forms of marketing communications, information dissemination and sharing among individuals is rapid when word-of-mouth occurs. The behaviour and views of individuals are significantly influenced by negative word of mouth communication, which tends to be weighted more heavily by consumers than positive communication (Solomon, 2004). Research has found that 90% of dissatisfied consumers do not purchase products or services of the company involved in the negative word-of-mouth communication (Solomon, 2003). Equally importantly, these consumers will communicate their dissatisfaction to at least nine other people and 13% of these dissatisfied consumers will communicate their negative view to more than thirty people. The Internet 'word of mouth' communication, i.e. viral marketing, is a far more effective, penetrating and faster medium compared to the traditional word of mouth communication (Helm, 2000). It is also a far more focused medium as consumers communicate their views in their social sphere (friends, colleagues etc) where their influence is more critical. This kind of communication can reach a wider audience gradually and can maximize its reach not only in their locality (as was the case with traditional word of mouth) but even on a national and global scale. The content of the message remains the same whilst it could be biased and filtered during traditional word of mouth communication (Helm, 2000).

### **VIRAL MARKETING POSITIONING AND EMERGING RESEARCH STREAMS**

Viral marketing spans a number of marketing domains. Kaikati and Kaikati (2004), for example, categorise viral marketing as a stealth marketing technique. While stealth marketing is a recent proposition within marketing, viral marketing relates to the advertising (Phelps, et al., 2004, Porter & Golan, 2006) and brand (Dobele, et al., 2005, Moore, 2003) elements of traditional marketing. Of the emerging new marketing streams, viral marketing is firmly positioned in the e-marketing domain. The other major domain that viral marketing fits into is marketing communications. This approach puts emphasis on the spread of the message and its viral characteristics (Welker, 2002). While conventional communication in marketing directly addresses the consumer, viral marketing communication aims to create an environment where customers and consumers transmit messages without the involvement of the original source. Therefore, viral marketing can also impact on

consumer behavior by influencing consumer perceptions, attitudes and views and has the potential to emerge as a key element of a company's promotional mix (Kirby and Marsden, 2006). The underlying principle of viral communication, however, remains the 'traditional' word-of-mouth paradigm that is now facilitated by the Internet. The existing literature on viral marketing indicates four emerging research streams making both theoretical/conceptual and empirical contributions: viral marketing comparisons, consumer-to consumer (C2C) viral marketing, studies of communications media and viral marketing positioning. Comparisons investigate different viral marketing variables in light of other marketing techniques such as television advertising (Porter & Golan, 2006). C2C viral marketing examines specific issues within the consumer context, such as impact on customer value and loyalty (Gruen, et al., 2006). Communications media studies may examine specific transmission modes like e-mail (Phelps, et al., 2004) and include communication domain studies (Welker, 2002). The final stream is viral marketing positioning, where research is concerned with identifying the positioning characteristics of viral marketing and drawing conclusions about the viral marketing domain (Dobele, et al., 2005, Helm, 2000). This research fits into the positioning stream as it investigates critical success factors of viral marketing, by developing, mapping and testing a model of critical factors for viral campaigns. The review of the literature, presented in the following sections focuses on the benefits and risks associated with viral marketing and constructs the basis for a model that could be used for viral campaigns.

### **A DESCRIPTIVE VIRAL MARKETING MODEL**

We believe that solutions to successful viral marketing campaigns must include some vital parts, which (1) engages the users, (2) rewards them and have a (3) social factor. We have talked about high and low integration before when it comes to customer engagement and we

Believe that these terms can be applied to both the social aspect and the rewarding aspect of the model as well. By using different integration levels we show what the campaign is able to offer the customers in terms of engagement, rewards and the social factors, and also to what

Extend the levels can be utilized in the campaign. These integration levels are divided into three: low, mid or high, based on a list of criteria that is explained within each factor where a high integration level is preferred. To achieve a high integration level a campaign must

Include most of the criteria mentioned in each of the factors. The integration level is considered as mid if these criteria are met but are not used frequently or well enough to earn a high integration level. Also, if only some of the criteria are met, the integration level is considered mid. If none or very few of the criteria are met. By building a campaign around

These terms we believe it has great prospects to achieve a viral spread.

### **ENGAGING**

It is important that a campaign has the ability to light a spark of emotion (Phelps et al. 2004). Engagement or engaging thus means that the user must become captivated by the campaign in some way in order to gain interest in it and further keep that interest high enough to decide to spend their time on it. This might be a common thing to point out and some people might be thinking; of course a user must be engaged and interested to take part of a product or campaign. Although this might be true it is all the same a very important factor to consider. The engaging factor also means that the campaign should be constructed in some way that gives the audience an opportunity to engage and affect the campaign rather than just pass through it. An ARG is built upon user engagement in this way but is by no means Restricted to ARG's.

Criteria for an engaging campaign:

- The ability to captivate the user into the campaign.
- Instances in which users can affect the campaign.

### **REWARDING**

The rewarding factor is directed against the specific user. How can I as a user get something? Out of the campaign? Do I have an opportunity to get rewarded? How vast is the access for the audience to get the most out of the campaign as possible? Does a user located in Europe get the same opportunity to get rewarded through a campaign as a user in the U.S? If more people have access to the reward a campaign can offer, the rewarding factor is higher.

A reward can come in various forms depending on what kind of campaign the audience is following, for example new material and information for an ARG or special discounts on products. The quality and/or quantity of a reward weigh heavily on the reward factor, and how well it fits the campaign. A short video clip of a computer might not be satisfying as a reward for answering a survey for a computer company but a video clip

might be the very best reward for completing an ARG. A reward should be something that the audience benefits from and sometimes may be expecting. The rewarding factor is volatile as what is a reward for one user may not be a reward for another user. A reward is not necessarily something the company stands for; sharing information of a campaign can be a reward in itself in terms of giving credit to the finder of the information and further spreading it, making use of the WOM-factor. Further the first one to find something and the first to share that information to the other customers enjoys a reward in the form of compliments and acknowledgements from the whole community.

Criteria for a rewarding campaign:

- Access for as many as possible to be rewarded for their actions.
- The quality and/or quantity of the reward, how well the reward fits the campaign. - The more users that benefits from one specific reward, the better.
- Sharing content to friends should benefit the user.

## SOCIAL

The social factor is dependent on how well the campaign use social media as a tool for their audience to connect to each other. There are many ways of users to spread information about campaigns through their own means even outside of the campaign. Examples of this are the usage of social media that is not included in the campaign or by chat and mail conversations.

This is not considered as making use of the social factor as the producers of the campaign is not involved in the customer process of spreading the information. If the campaign is actively leading the users to other social media sites the campaign is using social media as a tool in their campaign and therefore a social factor is involved.

It is still important that a campaign that desires to become viral have a social factor to them, possibly through existing social media rousing an own website. The social factor does not only refer to how the users connect to each other but also how the company connects to its users. The WOM factor is a very important term to keep in mind when creating campaigns but it is important to distinguish between the possibility of social connections that a campaign can offer the audience and the WOM phenomena that may arise during and after it has finished. While a campaign may only offer low social integration in terms of connecting users, WOM can still occur on the user's own accord outside of the campaign.

Criteria for a social campaign:

- Connects the users through existing social media or self-developed web services or applications. - Communication between the audience and the campaign/company.

## A MESSAGE BECOME A VIRUS

Most authors agree that one of the key success factors of viral marketing campaigns are the consumers who passes on the message. Cakim (2006) refers to these individuals as *influential's* and claims 'they are key in generation of viral messages'. Other synonyms used to describe these individuals include: evangelists, sneezers, super spreaders, high social networking potential persons, super e-mailers, influencers etc. While several authors analyzed consumers' motivations to pass the viral message along (see Phelps et al.2004, Brown et al.2010, Eckler and Bolls, 2011), very few tried to discover a way to identify the most effective message spreaders. If we briefly analyze the world of personal seeded videos that *went viral* i.e. received a great deal of attention (hits/views), we can see that in many cases it was *bloggers* who played a crucial role. We have seen in many cases that the actual *viral explosion* happened only after some media attention was directed towards the campaign (e.g. *Dove Evolution*). Nowadays, media is significantly fragmented on account of new entries such as bloggers, bloggers and all other forms of non-corporate (or corporate), niche (or mass) media voices that are emerging thanks to the internet. Bloggers are the dominant voices within their audiences and if they find a viral campaign or e.g. a seeded personal video interesting enough to post on their blog, this kind of exposure could create the avalanche effect. Perhaps, bloggers are some of the key *influential's* that marketers should go after when launching a viral campaign. Scott (2010) suggests that companies should establish relationships with

bloggers by reading their blogs' content and engaging in a discussion with them. He claims it is ineffective to simply make a list of relevant ones and send them a press release on the campaign, but instead we should build genuine bonds with them and then when we have some content relevant for them, ask them to publish it.

### **THE INFLUENCE OF VIRAL MARKETING**

It has been witnessed a myriad of success stories where individuals achieved the kind of exposure and success that they have never dreamed of, after only uploading a single video on youtube.com. The best example would probably be teenage pop star Justin Bieber who in less than three years went from being just another teenager to recording a CD, publishing a book, a film, guest starring in a dozen of TV shows (including *CSI* and *SNL*), being nominated for and winning many awards (MTV awards, Grammys etc.).

On the corporate front, one of the greatest successes is the *Will It Blend?* Viral marketing campaign. It was an investment of one hundred dollars and some creative thinking that resulted in 700% sales increase and immeasurable raise in brand awareness since the viral campaign began 5 years ago. The videos that make up the campaign are simple, one to two minute productions, within which a character named Dickson blends various objects (iPhone, Chuck Norris action figures, marbles etc.) in a blender, which is this company's primary market offering. According to Briggs (2009) who analyzed this particular campaign, *Will it blend?* Was such a great success because it was authentic and involved elements of popular culture.

Another, more recent, example is that of the Old Spice (*The Man Your Man Could Smell Like*) campaign consisting of a TV advertisement that was followed by a series of youtube.com videos made with the same tone as the TV advert and in the form of responses to youtube.com viewers' questions and comments. The campaign received a considerable amount of attention in the form of hits, references in popular culture and advertising awards. It is important to note that both of these campaigns' successes are partially to be credited to mass media involvement. Blendtec's campaign received a great deal of attention in the early stages in the form of airtime in various TV talk-shows as well as numerous mentions on many popular blogs. The Old Spice campaign started as a TV advertisement originally and was followed up by the internet campaign extension. This is not to say that these campaigns would not have yielded a great deal of attention on their own – nevertheless, the power of mass media cannot be neglected. The *virality* of a campaign means that being exposed to it results in the viewer wanting to share this experience with someone else by exposing them to it as well. Marketers should primarily create content that is viral enough in nature to ensure replication of the *virus*. In order to achieve maximum results though, marketers should also target various media *voices* and try to get them on board. Arguably, the media will present those stories that have already generated enough interest in the digital realm and are thus *safe bets* – in a sense it is only a matter of quantity i.e. number of hits, shares, comments and so forth, rather than a question of a particular type of content. The bloggers/bloggers (Perez Hilton, Shane Dawson, and Arjan Writes etc.), games (Angry Birds) and viral pieces (corporate: Will It Blend? Sporting Portugal etc. and individual: Rebecca Black, Diet Coke and Menthos etc.) Have been *picked up* by the media only after having achieved significant popularity on the internet. Hence, the corporate media, instead of being threatened by the democratization of media i.e. user generated content; it capitalizes on it and draws ready-made pieces from it. The threshold exposure which the campaign needs to pass before it becomes interesting enough for media to pick up on it will probably be drifting away further and further as an increasing number of companies and individuals have their take on viral marketing. Nevertheless, if we want to achieve the kind of viral success as the companies presented above have, it will have to be a combination of the campaign's quality and some media exposure.

Viral Marketing is a set of techniques that make use of online media such as social networks, among others, to achieve increased sales of products/services, or brand positioning thanks to the spread of the message or viral exponentially among stakeholders. The techniques involved to achieve viral marketing are diverse, however, have nothing to do with computer viruses, but they are called viral techniques relating to how prospects spread information of such products or services or brands. It's more like what is known as traditional word of mouth but using electronic media. Doing it the right way you can reach a lot of people quickly. Considering that video and content are the main trends in marketing for 2014, it is important to get them right.

Viral marketing is handled through online campaigns. Usually makes use of Blogs, web Landing Pages, Face book Fan Page, Twitter accounts, YouTube Videos, etc. The goal is to generate media coverage through high-impact issues or interest. The idea is that people will pass on and share interesting and entertaining content. Often this is done under the sponsorship of a brand or company that requires positioning a product or service to your target audience.

By using the Internet is possible to manage viral campaigns that are much cheaper and effective campaigns managed through other traditional means. Examples of viral marketing are the famous for being shareable. A message is issued, typically through email or with publications in social networks, and it is intended that those who read it say it to others who in turn will tell others and so on. Another technique is to create an incentive for the message that is passed from one person to another. This is known as Viral Encouragement. In this case there is some kind of reward that is provided when the person invites or advises another to go to visit and generate viral content. Viral marketing is another technique used under covered. In this case, it is not stated directly in the message what the brand or product is, but content is issued that impact those who are trying to imitate the propagation of the message. The viral message is presented as a page, activity, attractive or unusual news. The idea is that anyone who sees it believes it has made an interesting discovery, spontaneous and informal and therefore wants to propagate the information. The generation of a rumor makes many people interested in knowing about it. If this rumors creates controversy will then have a greater viral effect. The ways in which it is possible to spread a message of Viral Marketing has multiple paths. From the traditional word of mouth said earlier on, to issuing bulk email newsletters, the use of instant messaging, micro-blogging, twitter short messages, etc. To achieve success in viral marketing you should be creative and seek some controversy. Video is becoming especially important this year. Analyze the market and find out what the buzz is all about, that will help achieve the goal. The idea is to meet your needs and desires approaching it from your own perspective as a potential user of your products and services. You must emphasize the elements that differentiate you from your competitors.

#### **EVALUATING SUCCESS OF VIRAL MARKETING CAMPAIGNS**

Several researchers and industry specialists have tried to define parameters for measuring and evaluating success of viral marketing campaigns, however their findings are somewhat incoherent. According to Helm (2000), the primary purpose/objective of viral marketing is maximizing reach. Contrary opinion would be that of Jim Nail (BoD, WoM Marketing Agency), who states: ‘To succeed in WOM marketing, you need to find that segment of real ardent fans and create special programs and tools that will empower them to share that enthusiasm...I think viral is an extension of the loyalty discipline’ (Ferguson, 2008). According to Juvertson (2000, p.2), who was the first to define viral marketing, ‘ideal viral message will convert and retain a large number of recipients as new users...penetration, loyalty and frequency are appropriate evaluative criteria Cruz and Fill (2008) who conducted a research on viral marketing evaluation state that the approaches used to measure and evaluate the relative success of viral marketing communications are many and varied. Furthermore, they claim that these approaches range from changes in attitude and behavior, including the number of new users or levels of loyalty, to measures of reach, frequency, penetration, speed of transmission and the content of conversations, to mention a few (Cruz and Fill, 2008). Essentially, they assert that there is no single criterion that could be used as a measure of success of a VM campaign – instead they propose distinct goal setting at the beginning of the planning process which then serves as a success evaluation tool for the campaign. They propose a framework which starts with defining a VM campaign’s goal as being either cognitive (reach, awareness, knowledge), behavioral (hits, downloads, dissemination rate) or financial (ROI, brand equity developments as a result of the campaign). Subsequent steps involve defining the target audience, deciding whether the message is overt/covert commercial or non-commercial and finally choosing the media to launch it from (e-mail mobile phone, seeding website, blog) and the message format.

#### **A VIRAL MARKETING TYPOLOGY**

There are various cases that has been discussed and presented in the previous literatures of viral marketing that illustrates different viral marketing. At first instance, there is viral communication, which is interaction between message sender and receiver about a worthwhile issue. In this case, products, services and organizations are not a feature of the message; knowledge about these is intangible and intrinsic. In the second case, the transmission contains the actual product, service or organization marketed, but the aim of the message is not to market these. Therefore, it is unintentional viral marketing. In the third case, the message contains the product, service and/or organization being actively promoted. This type of viral marketing is commercial, as the aim is to promote a product, service or organization.

Table 1

Type	Social interaction	Unintentional	Commercial
Motive	Communication	Communication	Create Interest
Visibility	Intangible	Identifiable	Intention driven



Intention	Not viral	Not viral	Open Viral
Basis	Social	Social	commercial

The viral marketing typology presented in Table differentiates between social interaction, unintentional and commercial viral marketing. The key factors that determine this differentiation are the underlying motive for the action, the visibility of the product, service and organization, the intention of the originating source and the communication basis. The motive in both social interaction and unintentional is communication. In the commercial group it is to create interest in something such as a specific product, brand, service, or organization. Visibility is different in all three categories: in social interaction it is intangible, with the message not containing any obvious marketing messages. In the unintentional type, products and services are included in the content. In the commercial group, visibility is driven by the intention, which can be openly viral or concealed viral. Openly viral is where it is clear who the organization is or what product or service is being marketed. In concealed viral the intention is unclear. In this sub-type, ethical issues are likely to arise. Users may, for example, be tricked into believing a message originates from an un-biased, un-related source when this is not the case. The intention of social interaction is purely not viral marketing. In unintentional it can be not viral, concealed viral or a combination of both. As is the case in the commercial group, concealed viral raises concerns regarding ethical issues. The communication basis in social interaction is purely social. In unintentional it is social and/or commercial and in commercial it is commercially driven.

## CONCLUSION

This paper has synthesized the emerging body of literature on viral marketing. The validity of the synthesis is underlined by a viral marketing typology which differentiates between social communication with viral elements, unintentional viral marketing and commercial viral marketing. Researchers may find it interesting to develop their own typologies and future research can then compare these typologies. As with any emerging field of study, empirical evidence will bring in -depth understanding fostering knowledge creation about viral marketing. Scholars may be interested in empirically investigating diffusion patterns. At this point in time, legal issues applicable to viral marketing campaigns are unknown and further exploratory research is needed. The emerging literature treats viral marketing as a purely individual centered phenomenon, yet it would be interesting to study the role of organizations and organizational networks in the diffusion process

## REFERENCES

- Achrol, R.S. & Kotler, P. (1999). Marketing in the network economy. *Journal of Marketing*, 63, 146-163.
- Keller, K.L., (1993), Conceptualizing, Measuring and Managing customer based equity, *Journal of Marketing* 57, Jan 1993, pp.1.
- Allsop, D.T., Basset, B.R. and Hoskins, J.A. (2007), "Word of mouth research: principles and applications", *Journal of Advertising Research*, Vol. 47 No. 4, pp.398-411 Briggs, C. (2009), "Blend Tec, Will It Blend?: Viral video case study", SocialLens SL-0001, January 2009
- Richins, M. L. (1984), "Word of Mouth Communication as Negative Information," in *Advances in Consumer Research*, Vol. 11, Thomas C. Kinnear, ed. Ann Arbor, MI: *Association for Consumer Research*, 697-70
- Silverman, G. (2001). "The secrets of word-of-mouth marketing: how to trigger exponential sales through runaway word-of-mouth" *New York: AMACOM*.
- Cruz, D. and Fill C. (2008), "Evaluating viral marketing: isolating the key criteria", *Emerald Insight, Marketing intelligence and planning*, Vol. 26, No. 7, 2008, pp. 743-758.
- Granitz, N.A and Ward, J.C. (1996), "Virtual community: A sociological analysis, advances in consumer research", Vol.23, pp.161-166
- Klopper, HB. (2001), "Viral marketing: A powerful, but dangerous tool?" *Proceedings of the 3rd annual conference on the World Wide Web*.
- Howard, Theresa (2005-06-23). "USA Today: Viral advertising spreads through marketing plans". *USA Today*. Retrieved 2010-05-27. June 23, 2005, 2005
- Jump up ^ "Viral Marketing". Night & Day Graphics. 30 July 2012. Retrieved 6 October 2012.

- "Viral Marketing – Understanding the Latest Catchword". Video Marketing Bot Pro. 11 September 2012. Retrieved 6 October 2012.
- Jump up "Wired: Commentary: Sock Puppets Keep It Shill on YouTube". 2007-05-08. May 8, 2007.
- Granovetter, M.S. (1973), "The strength of weak ties", *American Journal of Sociology*, 79 (May), pp. 1360-1380.
- Brown, J.J and Reingen, P.H. (1987), "Social ties and word-of-mouth referral behavior", *Journal of Consumer Research*, Vol.14, December.
- Eckler, P. and Bolls P. (2011), "Spreading the Virus: Emotional Tone of Viral Advertising and Its Effect on Forwarding Intentions and Attitudes", *Journal of Interactive Advertising*, Vol.11, No.2, spring 2011.\
- Goldenberg, J., Libai, B. and Muller, E. (2001), "Talk the network: a complex systems look at the underlying process of word-of-mouth", *Marketing Letters*, Vol.12, No.3, pp.211-23.
- De Bruyn, Arnaud and Gary L. Lilien (2004), "A Multi-Stage Model of Word of Mouth through Electronic Referrals," *eBusiness Research Center Working Paper*, February.
- Porter, L. and Golan, G.J. (2006), "From subservient chickens to brawny men: a comparison of viral advertising to television advertising", *Journal of Interactive Advertising*, Vol.6, No.2, pp.30-8.
- Phelps, Joseph E., Regina Lewis, Lynne Mobilio, David Perry, and Niranjan Raman (2004), "Viral Marketing or Electronic Word-of-Mouth Advertising: Examining Consumer Responses and Motivations to Pass Along Email", *Journal of Advertising Research*, 44 (4), 333-348.
- Watts, D. and Peretti, J. (2007), "Viral Marketing for the real world", *Harvard Business Review*, May 2007, pp.22-23
- Cakim, I. (2006), "Online opinion leaders: a predictive guide for viral marketing campaigns", in Kirby, J. and Marsden, P. (Eds), *Connected Marketing: the Viral, Buzz and Word-of-mouth Revolution*, Butterworth-Heinemann, Oxford, pp. 107-18.
- Brown, M., Bhadury, R. and Pope, N. (2010) 'The impact of comedic violence on viral advertising effectiveness', *Journal of Advertising*: Spring 2010; 39, 1; ABI/INFORM Global, pg.49.
- Scott, D.M. (2010), "The New Rules of Marketing and PR: how to use social media, blogs, news releases, online video and viral marketing to reach buyers directly", *Jon Wiley and Sons*
- Briggs, C. (2009), "Blend Tec, Will It Blend: Viral video case study", SocialLens SL-0001, January 2009.
- <http://www.youtube.com/watch?v=IAI28d6tbko>
- <http://www.youtube.com/watch?v=owGykVbfgUE>
- <http://www.youtube.com/watch?v=xmpDSBAh6RY>
- <http://www.youtube.com/watch?v=CvVp7b5gzqU>
- <http://www.b2bmarketing.net/blog/posts/2013/10/20/power-viral-marketing-and-how-use-it-our-business>
- Helm, S. (2000), "Viral marketing: establishing customer relationship by 'word-of-mouse'", *Electronic Markets*, Vol. 10, No.3, pp.158-61.
- Ferguson, R. (2008), "Word of mouth and viral marketing: taking the temperature of the hottest trends in marketing", *Journal of Consumer Marketing*, Vol. 25 No. 3, pp. 179-82, ISSN 0736-3761.
- Phelps, J.E., Lewis, R., Mobilio, L., Perry, D. & Raman, N. (2004). Viral marketing or electronic word-of-mouth advertising: examining consumer responses and motivations to pass along email. *Journal of Advertising Research*, December, pp. 333-348
- Bayus, BL (1985). Word-of-mouth: the indirect effects of marketing efforts, *Journal of Advertising Research*, 25, 31-39
- Evans, M. , Jamal, A. & Foxall, G. (2006) *Consumer Behaviour*, Wiley.

- 
- Solomon, M. (2003) *Conquering Consumerspace; Marketing Strategies for a Branded World*, Amacom, New York.
  - Solomon, M. (2004) *Consumer Behaviour: Buying, Having and Being*, Pearson, Upper Saddle River, New Jersey.
  - Helm, S. (2000). Viral Marketing - Establishing Customer Relationships by 'Word-of-mouth'. *Electronic Markets*, 10(3), 158-161.
  - Dobeles, A., Toleman, D., & Beverland, M. (2005). Controlled infection! Spreading the brand message through viral marketing. *Business Horizons*, 48(2), 143-149
  - Kaikati, A. M., & Kaikati, J. G. (2004). Stealth Marketing: how to reach consumers surreptitiously. *California Management Review*, 46(4), 6-22.
  - Kirby, J. & Marsden, P. (2006) *Connected Marketing: The Viral, Buzz and Word of Mouth Revolution*, Butterworth-Heinemann.
  - Welker, C. B. (2002). The paradigm of Viral Communication. *Information Services & Use*, 22(1), 3-8.
  - Gruen, T. W., Osmonbekov, T., & Czaplewski, A. J. (2006). EWOM: The impact of customer-to customer online know-how exchange on customer value and loyalty. *Journal of Business Research*, 59(4), 449-456.
  - Porter, L., & Golan, G. J. (2006). From Subservient Chickens to Brawny Men: A Comparison of Viral Advertising to Television Advertising. *Journal of Interactive Advertising*, 6(2), 30-38

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## STAKEHOLDERS PERCEPTIONS ON ISSUES RELATING TO IMPACT AND SOCIAL INVOLVEMENT OF SELF HELP GROUP MEMBERS

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### ABSTRACT

**Aims:** The main objective of this paper is to examine the opinion of the direct stakeholders (viz. Promoters, Donors, Financial Institutions and the Group members) whether the aspects like impact on members of SHG and its involvement in larger social issues should be peripheral or core components of quality indicators of SHG.

**Study design:** The study was exploratory in nature with Meta Analysis as well as Psychometric Approach based on empiricism.

**Place and Duration of Study:** The present study covers all the direct Stakeholders of SHGs of three districts of Assam (Cachar, Karbi Anglong and Nagaon districts only). Information through Questionnaires collected during first half of 2013.

**Methodology:** With multi-stage random sampling method, 180 filled up questionnaires are collected from the respondents and these are edited in order to ensure the omission, completeness and consistency of the data. Finally, 75 SHG group members, 19 Financial, 16 Donors and 55 promoters were selected and formed the final sample size. The questionnaire was personally administered to all direct stakeholders except Group members. Some questionnaires were collected directly by the researcher on 'face to face method', while some of them were collected by arranging meetings at village level. The scale developed by Das and Bhowal (2013) are used in the present study.

**Results:** It was observed from KW Test that there is no statistically significant difference between the group means (i.e. different stakeholders) on the score of opinion of different stakeholders on the issue. Further, to investigate the degree of association, Eta test was conducted and it indicates low a level of association.

**Conclusion:** It can be discerned that opinion of different stakeholders on involvement of SHGs in larger social issues is not praiseworthy as most of the stakeholders shows their perceived opinion that SHGs involvement is 'neither core nor peripheral component' of quality indicators of SHG under given methodology which was also virtually supported by some other researchers. Further, Donor's are more concerned with the impact on member's social issues under given methodology.

**Keywords:** Assam, Core Component, Direct Stakeholders, Peripheral Components, Psychometrics, Impact on Members, India, Self Help Group.

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### INTRODUCTION

Micro finance has obtained a universal avowal as an important tool for poverty alleviation in many developing countries (Johnson & Rogaly, 1997; Gibbons & Meehan, 2002; Armendariz & Morduch, 2005; Bakhtiari, 2011). Micro finance perceived as a vital dynamic mechanism towards attaining the millennium target of reducing poverty and hunger by 2015 (Simanowitz & Walter, 2002; Fernando, 2004). Micro finance emerged in the 1970s as social innovators began to offer financial services to the working poor those who were previously considered 'unbankable' because of their lack of collateral. Micro Finance Institutions (MFIs) are now innovating to empowering the world's poor to improve their own lives. In the globe, such programmes are becoming increasingly popular as it is believed that it will lead to poverty reduction and empowerment of women.

Micro finance programme has a positive impact both on economic and social empowerment of women members along with reduction in poverty. The relevance of SHGs as powerful instruments of social, political and economic empowerment of women has also been unanimously accepted in many studies (Remenyi, 1991; Hulme & Mosley, 1996; Khandker, 1996; Schuler, Hashemi, & Riley, 1997; Rutherford, 1998; Khandker et al., 1998; Amin et al., 2001; Robinson & NetLibrary, 2001; Robinson, 2002; Sinha and Sinha, 2002; Antia and Kadekodi, 2002; and Jahan et al., 2004). Micro finance has created considerable thrust and expectations among the academics, policy makers of the Government, NGO leaders, donors, investors and other development practitioners in all over the world. In essence, micro finance has produced positive impacts on three vital areas of national development - alleviation of poverty, social development and women's empowerment. Regardless of their scale, outreach, location and the type of clients, all micro-finance programme interventions share the

common goal of human development, specifically the economic and social uplifting of those for whom the programme is targeted.

Self Help Group (SHG) one of the approach of micro financing is a unique innovation of credit delivery technique to enhance income-generating activities. The programme extends small loans to poor people for self-employment activities, thus, allowing the clients to achieve a better quality of life (Rahman, 1995; Hussain, 1998; and Morduch, 2000). It is the most sensational anti-poverty tool for the poorest, especially for women (Micro Credit Summit, 1997). It is recognised that micro finance smoothen consumption, reduces the vulnerability of the poor and leads to increase in their income. By giving the world's poor a hand up, micro finance can help to break the vicious cycle of poverty in as little as a single generation (Maheswaranathan & Kennedy, 2010).

### **MICRO FINANCE: IMPACT ASSESSMENT**

The term Impact Assessment is being substituted for evaluation with a greater focus on the outcomes of interventions, rather than inputs and outputs (Hulme, 2000). Implicitly, Impact Assessment is a method by which stakeholders search for more information about Micro Finance Institutions/ micro -finance programme effectiveness than is the one available from the routine accountability systems. Impact Assessment is also of significance to subsidised MFIs in terms of meeting the eternally increasing accountability demands of their governments (Nanayakkara, 2012). According to Hulme (2000), the conceptual framework of Impact Assessment has three main elements: viz. (a) model of the impact chain that the study is to examine; (b) the specification of the unit(s), or levels, at which impacts are assessed; and (c) the specification of the types of impact that are to be assessed.

Further, an almost infinite array of variables can be identified to assess impacts on different units. To be of use these must be able to be defined with precision and must be measurable. Conventionally, economic indicators have dominated in micro finance impact assessments with assessors particularly keen to measure changes in income despite the enormous problems. Other popular variables have been levels and patterns of expenditure, consumption and assets. A strong case can be made that assets are particularly a useful indicator of impact because their level does not fluctuate as greatly as other economic indicators and is not simply based on an annual estimate (Barnes, 1996). Baruah (2009) observed that one of the methods to study the impact of micro finance on poverty is by considering the changing income level of the SHG's members. However, an increased income level may not be a proper tool to measure the impact of micro finance on poverty; especially in a society where the labour market is not a well-organised one. Again, the increased income level may not be a permanent one. However, there should be no confusion that to improve the economic condition of the members SHGs must provide some income-generating asset to the members. Thus, the impact of SHGs on poverty of the members can be substituted by the impact of SHGs on the 'asset creation' of the members. To create asset the SHG members must use their loan amount for capital investment.

Variables of social impact refers to measurable changes to the human population, communities and social relationships resulting from development initiatives instigated by third sector organisations- NGOs or MFIs. Broadly speaking, these variables pertain predominantly to indicators proposed by various institutions in an attempt to set forth a standardised and measurable set of indices that determine human well-being in a society. The social indicators that became popular in the early 1980s (e.g. educational status, access to health services, nutritional levels, anthropometric measures and contraceptive use etc.) have recently been extended into the socio-political arena in an attempt to assess whether micro finance can promote empowerment (e.g. Schuler and Hashemi, 1994; Hashemi et al., 1996; Goetz and Sen Gupta, 1996; and Mayoux, 1997). This has led to the measurement of individual control over resources, involvement in household and community decision-making, levels of participation in community activities and social networks and electoral participation. The bulk of this work has focused on changes in gender relations, but there are sometimes partially formulated assessments of class relations within it (Fuglesang and Chandler, 1986). These extensions to the types of impact assessed permit impact assessments to be more sophisticated and to shed light on developmental impacts at a time when the goals of development have also extended.

Social impact by means of micro-financing activities and its evaluation can best understood by means of a standard model. However, there is no well acceptable model so far developed to access social impact (Ghalib, 2009). The Annual Human Development Report (Human Development Report, 2006) published by the United Nations Development Programme (UNDP) makes use of a number of such indicators that attempt to portray,

amongst other aspects, the social well-being of people around the world (Human Development Index (HDI), Gender-related Development Index (GDI), the Gender Empowerment Measure (GEM), the Quality-of-Life Index (QLI), the Economist Intelligence Unit (EIU). Several European researchers had developed Social Performance Indicators recently which have a lot of limitations (Jose Augusto Tomo Pisco, 2001, the foundation Argidus (2003), the CERISE (2000). It is conceived like an instrument of analysis, which can stimulate the internal reflection on the MFI or between its managers and their stakeholders as for the social objectives and the realisations and perspectives of the institution. Further, the Consultative Group to Assist the Poor (CGAP) rates the social performance of MFIs, from the main five dimensions of the Millennium Development Goals: i) Proportion of clients below the line of the poverty; ii) Improvement of the savings of the clients; iii) Improvement of the presence in the school of the children and reduction of the illiteracy; iv) Improvement on the access to the services of health; and v) Progress in terms of women empowerment. Moreover, the Inter-organisational Committee on Guidelines and Principles for Social Assessment, 1994 (cited in Glasson, 2000) presents an all-encompassing description of Social Impact Assessment (Impact Assessment Research, 2009) and suggests that cultural impacts also constitute an important element while assessing social impacts.

Thus, studies on the impact of micro finance on the poor will then have to consider different outcome variables. These could include increased consumption, income stability and income growth, reduced inequalities, health and education outcomes, nutrition improvements, employment levels, empowerment indicators, reduced vulnerability to shocks, strengthened social networks, and strengthened local economic and social development, and can vary according to who has been reached by these micro-finance services (e.g. women, the poorest etc). Kabeer (2003) refers to such dimensions of impact as cognitive, behavioural, material, relational and institutional changes. Kabeer (2003) and Brau and Woller (2004) further highlighted that impact studies should not only look at individual and/or household-level impacts, but also look at impacts on community, economy and national levels.

### **STATEMENT OF THE PROBLEM**

Different organisations have promoted or supported SHGs from a different perspective and agenda. The outlook of SHGs largely depends on how the promoters see them in the long run, whether they were intended to be temporary or permanent organisations. Looking across the prevalent perspectives on SHGs, it could be said that they are loaded with wide range of expectations on the part of different stakeholders. It is observed that different stakeholders have promoted SHGs with different expectations and understanding. A lot of research persuaded to access the impacts of SHGs on members on different sphere like economic, social, and other aspects. One modest effort has been initiated by Sa-Dhan (2003) in preparing and publishing a discussion paper on 'Quality Parameters of SHGs', wherein a lot of issues sets out in the quality assessment of SHGs. Moreover, the paper also set out some unresolved key issues for further discussion and research. Thus, the present study is limited to one of the unresolved issues of quality assessment of SHGs as raised by Sa-Dhan. Therefore, the present study is quite different from earlier studies as this study perceived the opinion of stakeholders whether the aspects like impact on members of SHG and its involvement in larger social issues should be peripheral or core components of quality indicators of SHG.

### **OBJECTIVE OF THE STUDY**

The present study is pursued to examine the opinion of the direct stakeholders (viz. Promoters, Donors, Financial Institutions and the Group members) whether the aspects like impact on members of SHG and its involvement in larger social issues should be peripheral or core components of quality indicators of SHG.

### **RESEARCH HYPOTHESES**

Given the survey of literature and objectives, the study is pursued to test the following statistical hypothesis

Ho: There is no significant association in the opinion of the direct stakeholders (viz. Promoters, Donors, Financial Institutions and the Group members) of SHGs regarding the issue whether impact on members of SHGs and its involvement in large social issues be peripheral or core components of quality indicators.

### **METHODOLOGY**

The research design and methodology devised in this paper is being presented which has been designed keeping in mind the focused objectives and with the aim of acquiring accurate and authentic data. The study adopted both exploratory vis-a-vis descriptive study design; this design was crucial in capturing the socio-economic

characteristic of the study groups such as demographics data, economic status, social benefits, and entrepreneurial activities. As explained by Mugenda, it helped in collecting data concerning behaviour, attitude, values and characteristic (Mugenda 2003). Further, the study adopted the approaches of Meta Analysis as well as Psychometric Approach (Michell, 1997) based on empiricism. Therefore, the present study also featured both the approaches. The present study covers all the direct Stakeholders (i.e. Promoter, Donors, Financer and the Groups members) of SHGs of three districts of Assam (Nagaon, Cachar and Karbi Anglong). Some State level MFIs and SHPIs are also covered within the purview of the study since they have place/places of business or directly linked with SHGs operating in these study districts. The study uses both primary data and secondary data. The information about the number of Self Help Groups in respective development blocks and number of other stakeholders is obtained from the Office of DRDA. The year of existence of SHGs and the age of the group are coded so that SHGs with one year and above and have income generating activities were purposely selected. Similarly those other direct stakeholders who are directly engaged in SHG promotion and financing are included in the study. In brief, multi-stage random sampling methods are used for the present study to collect primary data. As no such study was conducted in the context of Nagaon, Cachar and Karbi Anglong district of Assam are purposively chosen for the present study. At the next level, five Development Blocks from each district are selected randomly. In the later stage, three revenue villages from each of the selected Development blocks are purposively selected. From each revenue village, two SHG members, who are associated actively, are selected randomly ( $3 \times 5 \times 3 \times 2 = 90$  SHG member). Finally, 75 SHG members, 19 Financial institutions i.e. nationalised commercial bank and RRBs (operating in the study areas); 16 Donors and 55 promoters including banks, NGOs, NGO-MFI, Farmers Club and Government Departments are also selected randomly who are directly associated with the sampled SHGs. The questionnaire was personally administered to all direct stakeholders except Group member's category. Some questionnaires are collected directly by the researcher on 'face to face method' and some of them are collected by arranging meetings at village level. Information through Questionnaires collected during first half of 2013 i.e. from March 2013 to July 2013. Secondary data was collected from report on Micro finance Status by NABARD, Journals and websites. The important variables were formulated and the relevant data collected from the field were coded and analysed using SPSS (Statistical Package for Social Sciences) software. Perceptions of different stakeholders relating to quality parameters were expressed based on 5 Point Scale where SA= Strongly Agree (2), A = Agree (1), NAND = Neither agree nor disagree (0), DA = Disagree (-1), & SDA = Strongly disagree (-2). Further, the data collected through the questionnaire was analysed through the measures of descriptive statistics like mean, median and standard deviation. The Scale developed by Das and Bhowal (2013) for identifying impact on members & involvement in social issues as Peripheral or Core component of Quality Parameters of SHGs is used in the present study.

## ANALYSIS AND DISCUSSION

Given the methodology and the nature of the data, Kruskal Wallis Test (Non-parametric Statistical Test) is conducted to test the statistical validity of the hypothesis considered on this objective. From the Test Statistics (Table No. 1), at the  $\alpha = 0.05$  level of significance, it may be discerned that, given the methodology, there exists no enough evidence to conclude that there is statistically significant difference among the opinion of the direct stakeholders of SHGs regarding whether the aspects like impact on members of SHG and its involvement in larger social issues should be core or peripheral components of quality indicators of SHG.

Table No. 1: Kruskal Wallis Test on overall score on Impact on member of SHG & Involvement in Social Issues [Test Statistics <sup>a, b</sup>]

	Overall Score on Impact on member of SHG	Decision
Chi-Square	7.319	Since $p\text{-value} = 0.062 \geq 0.05$ , hence accepted the null hypothesis.
df	3	
Asymp. Sig.	.062	

a. Kruskal Wallis Test

b. Grouping Variable: Stakeholders Category

Source: Compiled from the Questionnaire

In addition to the Kruskal Wallis test, Eta test was also applied to test the degree of association (Table No. 2). Computed Eta measure [which is also directional measure] indicates low a level of association [i.e. 0.222], given that stakeholders category is independent as well as nominal data and Total Score of IMPC is dependent

as well as interval data. Further, the Eta Square, which is the measure of association depicted in Table No. 2, indicated the low level of association (0.049). Association exists but when stakeholders' categories are dependent and total score on IMPC is independent, the relationship is more strongly predictable as compared to the predictability when total score on IMPC is dependent and stakeholders categories are independent. The reasons for such low degree of association can be traced into the fact that there exists two distinct groups viz. Groups of IMPC-I [consisting some elements of quality parameters of SHGs where medians were equal] and Groups of IMPC-II [consisting some other elements of quality parameters of SHGs where medians were not equal]. Not only that, it can be discerned that Groups of IMPC-I are more decisive statements or factors influencing whether impact on members of SHGs and its involvement in large social issues be core or peripheral components of quality indicators of SHGs under given methodology.

Table No. 2: Measures of Association on overall score on Impact on member of SHG & Involvement in Social Issues

	Eta*	Eta Squared
Total Score on IMPC * Stakeholders Category	.222	.049
Stakeholders Category * Total Score on IMPC	.529	.280

\*Eta Directional Measures

Source: Compiled from the Questionnaire

To assess the perception of direct stakeholders of SHGs whether the aspects like impact on members of SHG and its involvement in larger social issues should be core or peripheral components of quality indicators of SHG, one scale is developed. The instrument to assess the perception of direct stakeholders of SHGs whether the aspects like impact on members of SHG and its involvement in larger social issues should be core or peripheral components of quality indicators of SHG consisted of 65 items referring to 9 different quality subscales. The maximum one respondent can score in each of the items is 2. Therefore, maximum possible score is 130. Similarly, the minimum one respondent can score in each of the items is -2. Therefore, minimum possible score is also -130. The interval of score from -130 to 130 was divided into five (5) equal classes to represent two different levels of perception (Singh & Bhowal, 2010; 2011) The scale is shown in the Table No. 3.

Table No. 3: Scale Interpretation on perception of different stakeholders on IMPC

Scale based on Score	Interpretation
130 to 78	Strong core component
78 to 26	Mostly core component
-26 to 26	Neither core nor peripheral component
-26 to -78	Mostly peripheral component
-78 to -130	Strong peripheral component

Source: Author

The overall score on the opinion of different stakeholders on whether the aspects like impact on members of SHG and its involvement in larger social issues should be core or peripheral components of quality indicators of SHG is interpreted with the help of Mean of Total Score on IMPC i.e. 22.95. From the mean value of 22.95, it is observed that different stakeholders believed that the impact on members of SHG and its involvement in larger social issues should be 'Neither core nor peripheral component' as the mean value (22.95) lies in between the scale range of -26 to 26 which represents the scale range of "Neither core nor peripheral component" (Table No. 4).

Further, it is observed that the mean score of different stakeholders are almost equal or little bit higher than the mean of overall score. The mean score of Promoter (24.47), Financial Institutions (17.47) and Group member (21.91) are quite similar as all the three groups of stakeholders perceived their opinion within the scale range of 'Neither core nor peripheral component' while Donor (29.13) perceived their opinion as 'Mostly core component'. This implied that Donor's are more concerned with the impact on member's on social issues while



Financial Institutions are less concerned on involvement in social issues under given methodology (Table No. 4).

Further, the descriptive scale statistics on the perception of different stakeholders on whether the aspects like impact on members of SHG and its involvement in larger social issues should be core or peripheral components of quality indicators of SHG whose the mean value is 22.98, variance is 197.293 and Standard Deviation is 14.046 (Table No. 4). It is observed that the mean value on perception of Donor on whether the aspects like impact on members of SHG and its involvement in larger social issues should be core or peripheral components of quality indicators of SHG is highest while that for Financial Institutions is lowest.

Table No. 4: Descriptive on overall score on Impact on member of SHG & Involvement in Social Issues

Descriptive	on Total Score on IMPC							
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Promoter	55	24.4727	12.47049	1.68152	21.1015	27.8440	-2.00	65.00
Donor	16	29.1250	15.94940	3.98735	20.6262	37.6238	5.00	67.00
Financial Institutions	19	17.4737	11.02204	2.52863	12.1612	22.7861	-2.00	39.00
Group Members	75	21.9067	12.93035	1.49307	18.9317	24.8817	-14.00	60.00
Total	165	22.9515	13.10409	1.02015	20.9372	24.9658	-14.00	67.00

Source: Compiled from the Questionnaire

## CONCLUSION

Micro finance institutions target the poor, with the aim to empower the socially and economically backward masses. It is seen in many cases that Donors make the funds available, while the MFIs facilitate their distribution and recovery. The donors, MFI staff and national and regional governments need and want to know how well the programme is performing. Programme evaluation by means of impact assessment studies provides the requisite information that provides vital feedback to make critical future decisions. Social impact assessment, in contrast to economic assessment, is still in its infancy in our country. As research expands, the discipline will develop and more models that are refined will facilitate understanding of this multifarious area. It is also realised in many studies that SHG movement improved the condition of downtrodden class of people including women and considered best-fit model of development in many countries. Computed Eta measure [which is also directional measure] indicates low a level of association [i.e. 0.222], given that stakeholders category is independent as well as nominal data and Total Score of IMPC (Issue whether impact on members of SHGs and its involvement in large social issues be peripheral or core components of quality indicators of SHGs) is dependent as well as interval data. The reasons for such low degree of association on total score can be traced into the fact that there exist distinct elements where the association is higher and in some elements where association is very low. Further, it was observed that there is no statistically significant difference between the group means (i.e. different stakeholders) on the score of opinion of different stakeholders on whether the aspects like impact on members of SHG and its involvement in larger social issues should be peripheral or core components of quality indicators of SHG. From the descriptive statistics on overall score on impact on member of SHG & involvement in social issues, it is observed that different stakeholders believed that the impact on members of SHG and its involvement in larger social issues should be 'neither core nor peripheral component' as the mean score of different stakeholders is 22.95. The mean score of Promoter (24.47), Financial Institutions (17.47) and Group member (21.91) are quite similar as all the three groups of stakeholders perceived their opinion on the region of 'Neither core nor peripheral component' while Donor (29.12) perceived their opinion as 'Mostly core component'. This implies that Donor's are more concerned with the impact on member's social issues under given methodology.

## GENERALISATION OF RESEARCH FINDINGS

In traditional quantitative social research the problem of generalisation is discussed under the concept of external validity (of experimental studies) wherein would the same result be found under a different set of circumstances are analysed (Sarafino, 2005). Again, in quantitative research, generalisability is considered a major criterion for evaluating the quality of a study (Kerlinger & Lee, 2000; Polit & Beck, 2008). A familiar

criticism of qualitative methodology questions the value of its dependence on small samples which is believed to render it incapable of generalising conclusions (Hamel et al., 1993; Yin, 1984; 1993; 1994). Further, Radhakrishna & Doamekpor, 2008 in their article “Strategies for Generalising Findings in Survey Research” argued that random sample which somewhat limits the external validity of the study because of non response of respondents. Indeed, generalisation represents an active process of reflection (Greenwood & Levin, 2000). Firestone, 1993 developed a typology depicting three models of generalisability that provides a useful framework for considering generalisations in quantitative and qualitative study viz. Statistical generalisation, analytic generalisation and case-to-case translation (transferability). The present study featured statistical generalisation, since it is based on random sampling which give every member of the population an equal chance to be included in the study with a determinable probability of selection (Polit, 2010). The present study is considered having general acceptability as a whole to the present socio-economic set up of the study area since the sample was selected randomly from the population and there were a low proportion of refusals and dropouts i.e. below 30% (Will, 1999). Further, the present study also satisfy the third model of generalisability i.e. case-to-case translation or reader generalisability (Misco, 2007) or transferability (Lincoln and Guba, 1985), since similar finding are also observed by other researchers in different contexts (external validity/ proximal similarity). Some of the findings of the present study virtually support stakeholder’s perception towards some specific impact elements. Thus, the present finding is of profound implications since attitudes & perceptions guide behaviour toward valued goals and away from aversive events (Baron and Byrne, 1993). In fact, the present study is totally a new dimension of SHGs quality and consequent impact assessment on social issues hence justification regarding generalisation of present finding needs further research and future investigation in the same subject area and in the same construct.

## REFERENCES

- Amin, R., St Pierre, M., Ahmed, A., & Haq, R. (2001). Integration of an essential services package (ESP) in child and reproductive health and family planning with a micro-credit program for poor women: experience from a pilot project in rural Bangladesh. *World Development* 29(9), 1611-1621.
- Antia, N. H. and Kadekodi, G. K. (2002). Dynamics of Rural Development: Lessons from Ralegaon Siddhi. A Joint Study by the Foundation for Research in Community Health, Pune and Centre for Multi-disciplinary Development Research, Dharwad (53-56). Retrieved from [http://books.google.com/books/about/Dynamics\\_of\\_rural\\_development.html](http://books.google.com/books/about/Dynamics_of_rural_development.html).
- Armendariz, B. & Morduch, J. (2005). *The economics of microfinance*. Cambridge, MA.
- Bakhtiari, S. (2011). Microfinance and Poverty Reduction: Some International Evidence. *International Business & Economics Research Journal* 5(12).
- Barnes, Carolyn (1996). Assets and the Impact of Microenterprise Finance Programmes. Washington DC: Management Systems International.
- Baron, R. A. and Byrne, D. (1993). *Social Psychology-Understanding human interaction*, (16<sup>th</sup> ed.). New Delhi: Prentice Hall of India Pvt. Ltd.
- Baruah, Prasenjit Bujar (2009). Self Help Group and Asset Creation: A Case Study of Deharkuchi Gaon Panchayat of Nalbari District, Assam. *The microFINANCE Review*, January-June, 1 (1), 183-197.
- Brau, J. C. & Woller, G. M. (2004). Microfinance: A comprehensive review of the existing literature. *Journal of Entrepreneurial Finance and Business Ventures* 9(1), 1–26.
- CERISE Report (2000). CERISE Report. Retrieved from <http://www.uneca.org>.
- Das, S. K. & Bhowal, A. (2013). Impact of Self Help Group on Members and Its Involvement in Social Issues: Core vs. Peripheral Issues. *International Journal of Business and Management Invention*, December, 2 (12), 48-72
- Fernando, N. A. (2004). Microfinance outreach to the poorest: a realistic objective? *Finance for the Poor* 5(1), 1-5.
- Fuglesang, A. and Chandler, D. (1986). *Participation as Process: What We Can Learn From the Grameen Bank*. Oslo: NORAD.

- 
- Ghalib, Asad Kamran (2009). Measuring the impact of microfinance intervention: A Conceptual framework of social impact assessment. Impact Assessment Research (IARC), University of Manchester. IARC Working Papers Series No. 24/2009.
  - Gibbons, D. & Meehan, J. W. (2002). Financing microfinance for poverty reduction. Draft paper commissioned by the Microcredit Summit Campaign. Malaysia: CASHPOR Financial and Technical Services.
  - Glasson, J. (2000). Socio-economic impacts: overview and economic impacts. In Morris, P. and Therivel, R. (ed.), *Methods of Environmental Impact Assessment*. London and New York: Spon Press.
  - Goetz, A. M. & Sen Gupta, R. (1996). Who takes the credit? Gender, power and control over loan use in rural credit programmes in Bangladesh. *World Development* 24(1), 45–63.
  - Greenwood, D. J. & Levin, M. (2000). Reconstructing the relationships between universities and society through action research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2<sup>nd</sup> ed., pp. 85-106). Thousand Oaks, CA: Sage Publications.
  - Hamel, J., Dufour, S. & Fortin, D. (1993). *Case study methods*. Newbury Park, CA: Sage Publications.
  - Hashemi, S. M., Schuler, S. R. and Riley, A. P. (1996). Rural Credit Programmes and Women's Empowerment in Bangladesh. *World Development* 24(4), 635-654.
  - Hulme, D. & Mosley, P. (ed.), (1996). *Finance against the poor* (Vol. 1 and 2). London: Routledge.
  - Hulme, D. (2000). Impact assessment methodologies for microfinance: Theory, experience and better practice. *World Development* 28(1), 79-98.
  - Human Development Report (2006). Human Development Report, Published by the United Nations Development Programme (UNDP). Retrieved from <http://www.undp.org>.
  - Hussain, A. M. (1998). Poverty Alleviation and Empowerment: The Second Impact Assessment Study of BRAC's. Rural Development Programme. Dhaka: BRAC.
  - IARC (2009). Impact Assessment Research, University of Manchester. IARC Working Papers Series No. 24/2009.
  - Jahan, R., Kelkar, G. and Nathan, D. (2004). Redefining Women's Samman: Micro credit and Gender Relations in Rural Bangladesh. *Economic and Political Weekly* 39(32), 3627-3640.
  - Johnson, S., & Rogaly, B. (1997). *Microfinance and poverty reduction*. Oxfam Publications.
  - Jose Augusto Tomo Pisco (2001). Social Evaluation of the Micro Finance Institutions in Mozambique. Retrieved from <http://www.uneca.org>.
  - Kabeer, N. (2003). Assessing the 'wider' social impacts of microfinance services: concepts, methods and findings. *IDS Bulletin* 34(4), 106–114.
  - Kerlinger, F. N. & Lee, H. B. (2000). *Foundations of Behavioral Research*, (4<sup>th</sup> ed.). Fort Worth, TX: Harcourt College Publishers.
  - Khandker, S. (1996). Grameen Bank: Impact, costs and program sustainability. *Asian Development Review* 14, 97-130.
  - Khandker, S. R., Samad, H. A., & Khan, Z. H. (1998). Income and employment effects of micro-credit programmes: Village-level evidence from Bangladesh. *The Journal of Development Studies* 35(2), 96-124.
  - Lincoln, Y. & Guba, E. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage Publications.
  - Maheswaranathan, S. & Kennedy, F. B. (2010). Impact of Micro-Credit Programmes on Eliminating Economic Hardship of Women. ICBI. Sri Lanka: University of Kelaniya. Retrieved from <http://www.kln.ac.lk/uokr/ICBI2010/7.pdf>.
  - Mayoux, Linda (1997). Impact Assessment and Women's Empowerment in Micro-Finance Programmes: Issues for a Participatory Action and Learning Approach (mimeo). Washington DC: Consultative Group to Assist the Poorest (CGAP).
-

- 
- Michell, J. B. (1997). Quantitative science and the definition of measurement in psychology. *British Journal of Psychology* 88(3), 355–83.
  - Micro-Credit Summit (1997). The Micro-Credit Summit: Declaration and Plan for Action. Washington, DC: Grameen Foundation.
  - Misco, T. (2007). The frustrations of reader generalisability and grounded theory: alternative considerations for transferability. *Journal of Research Practice* 3, 1–11.
  - Morduch, J. (2000). The Microfinance Schism. *World Development* 28(4), 617- 629.
  - Mugenda, O. M. & Mugenda, A. G. (1999). *Research methods quantitative and qualitative approaches*. Nairobi: Acts Press.
  - Nanayakkara, G. (2012). Measuring the Performance of Micro financing Institutions: A New Approach. *South Asia Economic Journal* 13(1), 85-104.
  - Polit, D. F. & Beck, C. T. (2008). *Nursing Research: Generating and Assessing Evidence for Nursing Practice* (8<sup>th</sup> ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
  - Radhakrishna, Rama & Doamekpor, Prosper (2008). Strategies for Generalizing Findings in Survey Research. *Journal of Extension* 46 (2). Retrieved from <http://www.joe.org/joe/2008april/tt1p.shtml>.
  - Rahman, H. (1995). Mora Kartik: Seasonal deficits and the vulnerability of the rural poor. In H. Rahman, & M. Hossain (Eds.), *Rethinking rural poverty Bangladesh as a case study* (pp. 54-67). Dhaka: University Press Limited.
  - Remenyi, J. (1991). *Where credit is due*. London: ITP.
  - Robinson, M. S. (2002). *The microfinance revolution: Lessons from Indonesia* (Vol. 2): World Bank Publications.
  - Robinson, M. S., & NetLibrary, I. (2001). The microfinance revolution: sustainable finance for the poor. World Bank Washington, DC.
  - Rutherford, S. (1998). The savings of the poor: Improving financial services in Bangladesh. *Journal of International Development* 10(1), 1-15.
  - Sa-dhan (2003). Quality Parameters of SHGs: A Discussion Paper. Discussion Series 2, August. Retrieved from <http://www.sa-dhan.org>.
  - Sarafino, Edward P. (2005). Research methods. Using processes and procedures of science to understand behaviour. Upper Saddle River: Pearson/Prentice Hall.
  - Schuler, S. R., Hashemi, S. M. & Riley, A. P. (1997). The influence of women's changing roles and status in Bangladesh's fertility transition: Evidence from a study of credit programs and contraceptive use. *World Development* 25(4), 563–576.
  - Simanowitz, A., & Walter, A. (2002). Ensuring impact: reaching the poorest while building financially self-sufficient institutions, and showing improvement in the lives of the poorest women and their families. Unpublished background paper for the Microcredit Summit 5, 10-13.
  - Singh, Ranjit & Bhowal, Amalesh (2010). Marketing Dimension of Equity related Risk Perception of Employees: Own Company's Shares vs. Other Company's Shares. *Management Insight*, Dec., VI (2), 22-36.
  - Singh, Ranjit & Bhowal, Amalesh (2011). Development of marketing-driven measure of risk perception. *Journal of Risk Finance*, 12(2), 140–52.
  - Will G Hopkins (1999). How to write a literature review. *Sport science* 3(1). Retrieved from <http://sportsci.org/jour/9901/wghreview.html>.
  - Yin, R. (1984). *Case study research: Design and method*. Beverly Hills, CA: Sage Publications.
  - Yin, R. (1993). *Applications of case study research*. Beverly Hills, CA: Sage Publications.
  - Yin, R. (1994). *Case study research: Design and method* (2<sup>nd</sup> ed.). Beverly Hills, CA: Sage Publications.
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## LEADERSHIP ANALYSIS

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### ABSTRACT

*“ The Servant Leaders must constantly ask, ’ How can I use myself to serve best?’ ”*

- **‘Robert K. Greenleaf’**

One topic that has been of the interest to the historians is the topic of Leadership. There are over 350 definitions of the term ‘leadership’. The concept of leadership has been evolving continuously with time. There is a difference between ‘Leadership’ and ‘Management’ on the basis of direction, alignment, relationships, personal qualities and outcome. The progress has been made in understanding the important features of leadership as a dominating influence in organisations as well as in communities. (Merlo, 2009). The perspectives of leadership relevant to different management levels and situations are analysed and compared specifically in relation to the leadership styles, leadership effectiveness and leadership power with servant leadership, participative leadership and transformational leadership and illustrating with real examples of famous leader in order to make the perspectives of leadership analysis approachable. As an enormity of the transform varies in diverse situations, driving change is often the most important profession of a leader. A good leader always builds long lasting value relationship and creates a new corporate culture environment for the people. All these types of leadership styles i.e. servant, participative and transformational should not only be employed at the lower, middle and top levels, respectively. They can be used at all the levels according to the situation at hand. Leadership has so many different senses to people; some think that leadership is a genuine phenomenon as it is very effective for organisations. Curiosity in the subject continues to enlarge and the overflow of articles and books about leadership demonstrates no indication of flagging.

**Keywords:** Leaders, Leadership, Participative, Servant, Transformational, etc.

### INTRODUCTION

Leaders are those who influence the person or group towards the attainment of the goals. Leaders can be ideals who inspire a person to boost their ability to perform their best to achieve their target. Leader is the one who goes first and leads so that others get motivated to follow him. To be a leader, a person must have a deep-rooted commitment to the goal that he will strive to achieve it even if nobody follows him (Gleaning, 2007).

*"The very essence of leadership is that you have to have vision. You can't blow an uncertain trumpet."*

- **‘Theodore M. Hesburgh’**

Leaders are those who influence others with nothing more and nothing less, for example: **According to John Maxwell**, The manager has the power to influence his employees. But does this influencing power make him a leader. His definition omitted the source of influence. “Leadership is defined as the ability to convert vision into reality”, in the words of **Warren Bennis**. We can relate this by citing an example that; if you motivate the employees in a common direction for the achievement of the goals, then only the vision can be converted into reality. These are some of the current leaders who are the ideal of the upcoming people and help them to attain their respective goals.

**Leadership** is an influence to move and direct towards the vision in a totally new way. In other words, Leadership is the process in which one person seeks the support of others to accomplish a task. Leaders will be those who empower others. There are many types of leaderships like:

- Authentic Leadership
- Servant Leadership
- Strategic Leadership
- Participative Leadership

- Transactional Leadership
- Transformational Leadership

Out of all the “**Leadership Perspectives**” mentioned above, three of them are explained below:

- **Servant Leadership:** Servant Leadership is type of leadership in which there is no self-interest of a person. He works for the welfare of the society and motivates them to achieve their goals. These are the leaders who inspire trust. They also don not see leadership as a position of power moreover, they creates such an environment where others can give their best performance for the given task. They are committed towards their work and are supportive. *Abraham Lincoln* is one of the greatest examples of servant leadership. The most important part of his leadership that illustrates the traits of servant leadership was his desire to free the slaves. His goal during his presidency was to give the people of America what they needed. *Mother Teresa* is another example of this type of leadership. She left her home when she was 18 years of age to serve the people. She looked after the poor, the sick, the orphaned and the ones dying in her Missionaries of Charity. She was one person who dedicated her whole life in helping others in need (*sites.psu.edu, 2014*). If we talk about an Entrepreneur Servant Leader, *Richard Murphy* is one of the best persons to talk about. He found the Rheedlen Centre for Children and Families, which was renamed as Harlem Children’s Zone. Almost 12,000 youth and their families go through this centre. He also crated Beacon Schools in New York which were converted into Community Centres in the evening. He also created a free program for low income earning families to fill in their tax returns so that they could maximize their Earned Income Tax credits.

These were just a few examples of the Servant Leaders but there are still many more people who made a difference in the world.

- **Transformational Leadership:** Transformational leader is the one who can give shape to the value, hopes and needs of his followers. He does not stop here, he encourages and empowers them. This leader thinks of different ways of doing the same thing. The transformational leader follows the principal of continuous change even if they are working on a small enterprise/group/organisation.

Nelson Mandela is one of the best examples of transformational leadership. Before becoming the President, Mandela already knew many high profile businessmen personally. Mandela asked them to join hands with him in running the health clinic in rural area. Mandela in order to bring change into the people’s lives in the flood devastated areas, got donations from many top businessmen. He changed the lives of more than 80,000 black school going children in flood devastated areas by getting them food and clothes.

Another example that can be sighted is of Sam Walton, the founder of Wal-Mart, who went to the Wal-Mart stores across the States to meet his employees and appreciate their contribution to the company (*Walton, Sam and John Huey, 1996*).

- **Participative Leadership:** The main essence of this type of leadership is the involvement of people. Everyone is free to communicate with anyone regardless of their rank and communication. The influence that a person can have on the others depends solely on his /her competence and knowledge. These types of leaders consult their associates before taking any decision or consult them after taking the decision first to see if it is acceptable to them. The team would be collectively responsible for the decisions taken.

Donald Trump is a suitable example for this type of leadership. According to his employees, he is not only fair but also absolute. He thinks about the decision very carefully, and he will also go and talk to the persons concerned and resolve the issue. He is very generous and keeps everyone in mind (*Zucker, 2006 – 2012*).

**Leadership Effectiveness** at various management levels with reference to three perspectives mentioned earlier.

1. **Servant Leadership:** servant leaders are generally at the lower levels of an organisation because they can socialise very easily and empathise with the employees. The main duty of the servant leader is to listen to

the employee's problems and suggestions. He helps people to develop their skills and perform upto the mark. A servant leader serves the employees (*Greenleaf, R.K. 1970*).

An example of servant leader at the lower level can be of a manager at the lower level. He is the voice of the employees at the lower level of the organisation. If any staff has any problem he can persuade the middle management to set those things right. The servant leader will see to it that the staff grows and he serves them in a correct way so that they feel content to work as community.

2. *Participative Leadership*: This type of leadership is generally in the middle level of the management. They generally act as bridge between the servant leaders at the lower level and the top management. The servant leaders give feedback about the organisation to them and they report to the top management.

This type of leadership in the middle management can be most effective when:

- The leader makes it clear that what is it exactly that he expects from his followers
- What is the role of each individual in the success of the business/organisation
- What would be the result of poor performance
- The followers/employees should be involved in the creation of plans
- The communication between the organisation should be open and honest and everyone should be encouraged
- He should also know that what boosts the morale of the employees; he should work at removing all the barriers.

3. *Transformational Leadership*: These types of leaders are generally placed at the top level of an organisations management. They lead an organisation and take all the major decisions concerning the organisation. Their main responsibility is to change the mind set and the thinking of all the people working under them and inspire all of them to work for the achievement of the common goals of the organisation leaving aside all their personal goals. A transformational leader is most needed when an organisation is very stagnant and needs some reformation.

He can be most effective if:

- He finds out the time to listen to each of his employee
- The communication between the workforce and the leader results in a better workplace
- The leader is able to discover the needs of the employees and is able to fulfil those needs
- They know the strengths of their employees and motivate them to work for the improvement of the same.

The transformational leader tends to keep everyone under him happy which results in reduction of the employee turnover. This in turn reduces the hiring and training cost.

According to the overall business scenario, the best style of leadership is transformational leadership. But, only one leadership style cannot be used in all the situations. So, one should get the knowledge of all the various leadership styles and then adapt their approach according to the situation at hand.

**Leadership Styles:** All the leadership styles are different roads to the same destination. Some are complicated and longer than the others.

Starting with servant leadership, Servant leader would always concentrate on dealing with people problems. He/she would identify the personal as well as professional problems faced by followers. For instance, a union leader of factory workers is a servant leader at its best; he would care for people with all his heart.

- He could implement benefits scheme for workers.
- Seek legal help for resolution of issues.
- Help them in dealing with personal problems
- Governance policy

About servant leadership, Starbucks shares a momentous message how to teach your followers and how to lead themselves. Here Starbucks CEO "Howard Schultz" has the last word: "*Surround yourself with great people and get out of the way*". These words from CEO of Starbucks emphasis on empowering people which gives them a feeling of an association.

However, participative leader in the same setting would deal with things differently. He/she would try to involve everyone in making decisions and developing the organisation. He could implement policies like

- Having suggestion box

- Complaints resolving committee
- Create teams and team leaders
- Appreciation policy
- Employee engagement activities

For instance, another example of a participative leadership is “*Carlos Ghosn, CEO of Renault and Nissan*”. Ghosn always have trust in his employees and provide them with challenges to perform because he believed that change is always from the bottom of the organisation and it can never be forced by the top management. He would empower the people for better and smooth running operations. On the other hand, transformational leader would observe the settings, identify the areas to be improved and influence the followers towards the common goal. Some of the policies he/ she could implement are:

- Strengthen communication in order to get timely reports on performance of an organisation.
- Revise the policies and procedures to alignment them with mission and vision statements.
- Initialise the training programmes in order to shape the new organisation.

For example, “*Lynne Barker*”, who is a founder of Jirah Outreach Ministries, she had a vision; to feed, clothed and educate 300 Aids orphans in Kenya in their home village. But she doesn’t know how to achieve this. So, with her idea and passion she made it happen step by step.

**Power:** Power is an intangible force in organisations. It cannot be seen, but its effects can be felt. Power can be defined as the ability to influence others to achieve the desired outcomes. (*R. L., 2009*). There are seven types of powers: -

- *Legitimate Power (Formal Authority)*: It is a type of leadership power that is derived from a position of authority in the organisation.
- *Reward Power*: It is the power which leaders use to influence the subordinate by providing them with things they want, which can lead to better performance.
- *Coercive Power*: It is opposite of Reward Power, it is basically used to threat or punish which includes key information, demotion and dismissal.
- *Expert Power*: When the person is having a special ability and skill required for performing the task by the followers.
- *Referent Power*: This is a type of power that characterised employee’s identification, respect and admire, so that they wish to follow the leader.
- *Rational Power*: Leaders who influence others by giving logics, reasons and have the ability of solving problems.
- *Informational Power*: These leaders are those who have access to private information and/or important news to share so that they can achieve their respective goals (*Yukl G. 2010*).

**Servant Leadership:** The powers that a servant leader can exercise could be reward power, expert power and referent power. The power comes from manager in organisation.

As discussed, servant leadership is all about welfare of the society. So, servant leaders use reward power to influence their followers by rewarding them by what they need so that they get motivated and try to perform in a better way to achieve their objectives. Secondly, they use expert power by which they utilize their skills and abilities to the given task and that might also affect its followers which directly leads to their success. As they are using own skills they developed by their experiences. Lastly they use referent power which might put an impact on its followers about their leader. This might help them to gain credentials and make stand out of the common crowd with a special identity.

Different powers come to play at different situations. Reward power is most important while working with lower level and expert and referent powers are highlighted while dealing with top and middle levels.



**Participative Leadership:** The powers that ‘Participative Leaders’ can put into effect could be rational power, expert power and informational power. The power comes from supervisor or managers in an organisation.

As described, participative leadership is all about participation of both the leader and the other members, and came to a decision by everyone’s agreement. So, participative leaders use rational power to take decisions, as there is participation of everyone and decision taken by leader is totally based on logics and facts. Secondly, they use expert power to achieve success in which they use their skills and ability at their best. Lastly, participative leaders use informational power as they share all the information and news with others so that everyone should understand what is going on? This might help the leaders to communicate with anyone freely and can achieve success.

The participative leaders use rational power at lower level the most and expert and informational power is for middle and top management level.

**Transformational Leadership:** The powers that ‘Transformational Leaders’ can work out could be reward power, rational power, expert power and referent power. The power comes from Boards of directors in an organisation.

As discuss, transformational leadership is all about motivation, moral and performances of others who follow, to complete the task as one team. So, transformational leaders use Reward power to motivate their followers and team members. Secondly, they also use rational power to judge others and take decisions on the basis of logic and reasons. Thirdly, they use expert power because they have knowledge and skills needed to transform an organisation. Lastly, they use referent power which might put an impact on the team members. This might help the leaders to align with team members with tasks that enhance the performances of the team members.

Rational and reward powers are most important for lower level management and expert and referent power are used while working with middle and top level management.

## CONCLUSION

In a nutshell, I would like to conclude that servant leadership is more effective at the lower level, where as participative leadership works well in the middle levels of management in the organisation, and we talk about transformational leadership styles, it is more suitable in the top level of the management. All these exercise different types of powers. The top management uses reward power, the middle management uses expert power where as the lower management uses referent power.

Same is the case with the participative leadership style. They use expert power at the top level, rational power at the middle and informative power at the lower levels. If we talk about transformational leadership, they use reward at the top level, rational in the middle and informative at the lower level of the management.

All these power help them run an organisation at its best. But these powers can be used interchangeably. This means that all these types of powers can be interchanged between the levels of management. All the levels of management can choose from the type of power they want to use. All this depends on the situation at hand and the choice of the management.

Formal authority is also there but in today’s business and corporate world the less formal is the organisation, happier are its employees. This means that the doors of the management should always be open to the employees. Feedbacks and suggestion should always be welcomed.

All these types of leadership styles i.e. servant, participative and transformational should not only be employed at the lower, middle and top levels, respectively. They can be used at all the levels according to the situation at hand. For example; a servant leader may be at the top management and be successful at it. But there should be a little bit of all the leadership styles mentioned to make an organisation successful and long lasting.

According to my general viewpoint about leadership analysis: I don’t know if I fit in all the leadership styles but yes if there is a need of representing, motivating and influencing people, I will always take a stand and try to help, to motivate and support them because I am influenced from the great leaders like Robin Sharma, Jack

Welch, Adolf Hitler, Indra Nooyi, Bill Gates, Nelson Mandela, Donald Trump, Mohan Das Karam Chand Gandhi, Sardar Bhaghat Singh, John Key, A.P.J. Abdul Kalam, Mother Teresa, Steve Jobs, etc. So, I will definitely use my knowledge, skills and try to share with people who need that.

*“Leadership should be aimed at helping to free people from oppressive structures, practices and habits encountered in societies and institutions, as well as within the shady recess of ourselves. Good leaders liberate. Further, we can liberate leadership thinking itself from a narrow instrumental confine, so it may reconnect with ideals”.*  
– A. Sinclair

## REFERENCES

- Avolio, B.J., Zhu, W., Koh, W. and Bhatia, P. (2004), "Transformational leadership and organizational commitment: mediating role of psychological empowerment and moderating role of structural distance", *Journal of Organizational Behavior*, Vol. 25, pp. 951 – 968.
- Bass, B. M. (1990), *Bass and Stogdill's handbook of leadership*. New York: Free Press.
- Fletcher, J.K. (2004), "The paradox of postheroic Leadership: an essay on gender, power, and transformational change", *The Leadership Quarterly*, Vol. 15 No. 5, pp. 647-61.
- Gillespie, N.A. and Mann, L. (2004), "Transformational leadership and shared values: the building-blocks of trust", *Journal of Managerial Psychology*, Vol. 19 No. 6, pp. 588-607.
- Greenleaf, R.K. (1970), *The servant as leader*. Westfield, IN: The Greenleaf Center for Servant Leadership.
- Gleaning, A.(2007). *Vtaide*. Retrieved March 30, 2014, from <http://vtaide.com/gleanings/leader.htm>
- Hall, J., Johnson, S., Wysocki, A., & Kepner, K. (2008), *Transformational Leadership: The Transformation of Managers and Associates*.
- Inc. (2014) Retrieved from: <http://www.inc.com/paul-schoemaker/what-made-mandela-a-transformational-leader.html>
- Jackson B., Parry K. (2011), *Studying Leadership*, London: Sage
- Mann, M. (2014) Learning To Lead. *Independent School*, 73(3), 70.
- McGirt, E. (2012). Do You Pass The Leadership Test?. *Fast Company*, (171), 63.
- Merlo, R. L. (2009). Introduction To Leadership. In R. L. Merlo, *The Leadership Experience Asia Pacific Edition 1* (p. 4). Australia: Cengage Learning Australia .
- Pucella, T. (2014). Not Too Young to Lead, Retrieved From <http://www.tandfonline.com/eprint/Yq9iMpAMnsw2cd5RU4uJ/full#.U0TELaXFWSo>
- *sites.psu.edu*. (2014). Retrieved 03 27, 2014, from <http://sites.psu.edu/leadership/2013/11/09/a-true-servant-leader-mother-teresa/>
- Somech, A. (2003). Relationships of participative leadership with relational demography variables: a multi-level perspective. *Journal of Organisational Behaviour* , 1003 -1018.
- TheHuffingtonPost (2014), Retrieved from: [http://www.huffingtonpost.com/paul-schmitz/true-servant-leadership-f\\_b\\_3016044.html](http://www.huffingtonpost.com/paul-schmitz/true-servant-leadership-f_b_3016044.html)
- Zucker R. (2006 – 2012) *Celebrity Entertainment Magazine*, Retrieved from: <http://emol.org/celebrities/trump/niceguy.html>
- Yukl G. (2010), *Leadership in Organisations – Seventh Edition*, New Jersey: Pearson Pg 201 – 202

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## **Examples of References**

All references must be arranged first alphabetically and then it may be further sorted chronologically also.

- Abrams, F. W., (1951), ‘Managements Responsibilities in a Complex World’, Harvard Business Review, 29(3): 29 – 34.
- Bateson, C. D.,(2006), ‘Doing Business after the Fall: The Virtue of Moral Hypocrisy’, Journal of Business Ethics, 66: 321 – 335
- French, P. A. (1984), “Collective and Corporate Responsibility”, Colombia University Press, New York.
- Morris, C. (1999) *Quantitative Approaches to Business Studies* (5th edn), London, Financial Times Pitman Publishing.
- Khushalani, Lakhan and Kulkarni, Prasad (2007), “Network Security”, Presented at the National Conference on Emerging Technologies in Control and Instrumentation, October 19-20 2007, Mumbai: TSEC, 53 – 55.
- Dees, J.G. (2001), “The Meaning of Social Entrepreneurship”, Retrieved from: [http://www.caseatduke.org/documents/dees\\_sedef.pdf](http://www.caseatduke.org/documents/dees_sedef.pdf) (accessed 10th December 2010).
- K. Mae Heussner (2008). Jeff Ooi - from digital to political clout? Accessed 15 May 2008 from <http://www.Malaysiakini.com.news/78757>.

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