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From the Editor's Desk:

It gives me great pleasure to present the inaugural issue of Uttranchal Business Review.

We all know that Research is an unending pursuit and always requires refinement and polishing, so, our journal offers avenue for researchers and practitioners to present incisive findings on contemporary issues in management. The focus of our journal is research based articles, thought provoking pieces, philosophical view about business and in general concerns on dynamic world scenario and needs of the day. We encourage young research scholars and faculty of management institutes to make use of this platform to publish their work and express their ideas for further research. We have a variety of articles in the first issue.

*The globalization of business has opened many opportunities and become a hot bed of research and investigation. Dr. L.S. Sharma has analysed Economic Effects of Trade Liberalization of Indo-Bangla Free Trade: A CGE Model Simulation Analysis. "Reconciling The Theory of Efficient Market Hypothesis in The Era of Recession 2007" - An Empirical Evidence from National Stock Exchange explored by Dr. Prakash Tiwari and Sandeep Kumar Ghose makes interesting reading .the developing countries like India is battling for attracting more and more foreign direct investment. Mr. Pradeep has presented the challenges faced by Indian industries to attract more FDI. Dr. Tariq has presented A Comparative Study of Different Mutual Funds & their Performance in India through Sharpe Index Model. The Present Employment Scenario in Organised Sector has been discussed by Meena and Satinder Kumar. HR issues on contract Labour and Working Conditions for Contract Labour have been discussed by Dr. H.S. Grewal. The subsequent four research papers are on Marketing : *The Dark Side Practices Of Customer Relationship Management (Crm)* is presented by Dr. Seema Singh. An Empirical Evaluation of Customer Satisfaction for The Bottled Water - A Case Study Of Jodhpur City by Dr. Ashish Mathur; Factors Affecting Customer satisfaction of pre-owned cars: An Empirical Study on Customers of Uttrakhand State by Dr. Rajesh Manchanda and "Consumer Buying Behaviour Towards Fast Food Restaurants: An Empirical Analysis" by Mr. Devkant Kala. *Social Networking and its Application in Network communication* is presented by Dr. Humansu Bahuguna. Dr. M.S. Rawat and Mr. Amit Gautam. The last paper is a macro approach dealing with such issues as :E-Governance in India: Transformation in Approach by Ashish Gupta, Ashish Mohan Dubey , Manmohan Mishra and Dr. G. P Sahu.*

We are looking forward to your reactions, suggestions and feedback. I must thank our advisory board members and members of editorial board for their help and guidance.

I remain,

*Dr. D.S. Chaubey, Professor
& Editor-in-Chief*

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Economic Effects of Trade Liberalization of Indo-Bangla Free Trade: A CGE Model Simulation Analysis

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Abstract

This paper gives a quantitative assessment of possible trade affects resulting from different trade liberalization scenarios of Bangladesh and India. The simulations are based on the GTAP model, a computable general equilibrium model. The paper uses the GTAP database and own estimates of protection in the trade. The study compares different scenarios, which differ in the extent of country specific liberalizations in the existing trade. Our findings suggest towards marginal gains from the comprehensive tariff cuts in the service sector. This study uses computable general equilibrium (CGE) model simulation analysis and tries to estimate the economic effects of FTAs to the countries. Section 1 and 2 provides the overview of the development of trade in the countries under study viz., India and Bangladesh. Section 3 discusses the literatures of the study and section 4 introduces to the brief features of CGE models and simulation models are discussed based on the database used in GTAP. This section also explains the methodology to analyze the economic effects of the both countries using the CGE model. Section 5 discusses the results obtained followed by conclusions in section 6.

1. Introduction

In recent years efforts has been made to conclude free trade agreements (FTAs) as have been gathering momentum in South Asia as well. FTAs can have significant economic impacts on their member and non-member countries. In particular, the economic impacts are likely to be greater when FTAs/EPAs are more comprehensive ones involving not only trade liberalization but also liberalization of trade in services and investment, trade and investment facilitation measures such as simplified customs clearance and mutual recognition of standards, and technical assistance. This study employs a computable general equilibrium (CGE) model simulation analysis, the most widely utilized method to estimate economic effects of FTAs and economic integration, to assess the impact of economic partnership among the countries India and Bangladesh.

Before analyzing economic effects of an India+Bangladesh, the next section provides overviews on changes in patterns of trade. The section 3 briefly introduces the literarture of Indo-Bangla trade studies followed by section 4 which describes the basic features of CGE models and attempts to capture the economic situation of the India+Bangladesh based on the database used in the analysis. The section 4 also explains the methodology to analyze the economic effects of the Indo Bangla FTA using a CGE model. The results of the analysis are discussed in section 5, followed by conclusions in section 6.

2. Patterns of trade in India and Bangladesh

India:

India's real GDP has been growing at the average annual rate of 3.5% during the period 1950 to 1980. During 80's growth accelerated to 5.6% per annum and in 1991, India suffered an external debt crisis. In response to it, India made structural changes in trade, exchange rate mechanisms, and industry and finance sector. The service sector grew by 8% annually. The positive outcome of the growth process during the reform period resulted in a reduction of the poverty rate from 36.0% in 1993/94 to 26.1% in 1999/2000 (Batra, 2005). Despite the industrial recession in 90's, economic impact of financial fallout, poor monsoon, rising oil prices, rapid growth in exports made substantial foreign exchange reserves of US\$ 100 billion has been accumulated. Exports were growing by about 10% in 2003 (RIS, 2004:22). The interest rates have risen, and construction growth has already tapered. Agricultural planting has responded to rising prices. These trends are expected to help moderate inflation. The outlook is bullish at estimated 8% growth rate in 2007 and a further improvement to 8.3% in 2008 (ADB, 2007)

Bangladesh: Bangladesh gain independence from Pakistan in 1971. Despite the large scale industrialization, the country began its economic reformation under the aegis of IMF from 1976 onwards. Result was that the country was able to integrate to the global economy due to which exports, imports and FDI increased and progressively entered into the global market. (Rashid, 2005). As of now, the private sector plays an important role in the economic growth which has been indicated by the strong GDP growth of 6% over the past four years. Despite the political upheaval in 1997, the GDP growth is forecasted to be around 6.5%. The per capita GDP rose from US\$298 in fiscal 1992 to US\$389 in fiscal 2003. GDP growth has been consistent throughout the 1990s at 4 percent and improved further after 2000 due to growth in agriculture and industrial sectors. The global economic meltdown led to a decline in exports and decline in remittances from overseas workers making the GDP rates to decline. The GDP growth was observed rising to 5.9 percent in 2004 (Rashid, 2005)

Trade Flows :

Although considered small in comparison to India's trade with developed countries, India's trade to SAARC countries remain important. Bangladesh has a little less than 1% share of trade with India, imports from Bangladesh has been growing rapidly. India displays a strong regional orientation for exporting manufactured products such as automobiles, pharmaceuticals, and agricultural implements. These highly segmented industrial products accounted for 36% of India's regional exports, compared with 7% of its exports to the rest of the world. Furthermore, India consistently has a trade surplus with Bangladesh and its size is increasing.

	<i>Bangladesh</i>	<i>India</i>
<i>Exports - commodities:</i>	<i>Garments, jute and jute goods, leather, frozen fish and seafood (2001)</i>	<i>Textile goods, gems and jewellery, engineering goods, chemicals, leather manufactured products</i>
<i>Imports -</i>	<i>Machinery and</i>	<i>Crude oil,</i>

<i>commodities:</i>	<i>equipment, chemicals, iron and steel, textiles, foodstuffs, petroleum products, cement</i>	<i>machinery, gems, fertilizer, chemicals</i>
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3. Literature Review

Subbash C Jain (1999) studied the free trade agreements in South Asia and studied the formation of SAPTA and suggests that India must take the lead to make SAPTA a reality. The policy shifts in Bangladesh and its neighbouring countries was studied by Mustafizur Rahman (2002). The study focuses in the issues relating to co-operation in the field of trade and commerce in South Asian countries. It emphasises on the need for intra regional trade to make SAPTA effective.

David Dave (2001) explored the need of price stabilisation as the need of the hour to push towards free trade. He emphasizes that pure price stabilisation for rice will help macroeconomic stability. He puts forward the opinion that the Asian countries has been successful in stabilising price for rice.

The trade liberalisation in South Asia and its economic gains made through these policies was studied by Saleem M. Khan (2002). He suggests that it has opened a new range of challenges and opportunities in the region. He also felt that there is a need for building economic institutions to facilitate regional development as a critical factor.

Rahman, Mohammad Mafizur (2008) discusses the trade deficient of Bangladesh in relation to India and its increasing deficit exponentially. It identifies the factors responsible for this imbalance and suggests policy measures to overcome this. He suggests cordial and productive cooperation between the two countries as a tool to overcome the trade deficit.

Mahinda Siriwardana and Jinmei Yang (2007) studied the interactions between India and Bangladesh. They suggest that Indian investments in Bangladesh can enhance new supply and export capacities of Bangladesh. The study highlights the possible benefits and benefits to the two nations under free trade agreement between the two countries.

4. CGE Model and GTAP

Simulation analysis based on a CGE model is typically used to estimate the economic effects of FTAs and/or economic integration. In CGE models, assumptions are made on how producers, consumers and governments behave. For example, producers are assumed to maximize profits while consumers to maximize utility. As for government spending, many models assume that government collects revenues from various types of taxes including direct and indirect taxes and import tariffs and allocates its expenditure among different products according to pre-fixed sectoral shares.

Most CGE models assume perfect competition in product/service markets as well as in markets for the factors of production including labour and capital. The Armington assumption, in which products are differentiated according to their production sites, is applied to the structure of consumption and

production in goods and services. Moreover, in virtually all the CGE models, factors of production, labour and capital, are assumed to be mobile among sectors within a country but not mobile across borders. Furthermore, since most models are static in the sense that no time dimension is explicitly considered, a comparative static simulation analysis is employed.

This section analyzes the economic effects of India and Bangladesh using a CGE model with the characteristics described. The study employs the global trade which can be activated through Analysis Project (GTAP) model, the most pervasively utilized CGE model, and the GTAP 7 database ver.7 (the latest version) that corresponds to the global economy in the year 2008.

The GTAP ver.7 database is composed of 115 regions and 57 sectors. In the analysis, only 2 regions India and Bangladesh regions are aggregated leaving the rest of the world. (Table A.1 in the Appendix), and 57 sectors are aggregated into 10 sectors (Table A.2).

Table 1 presents basic economic data available from the GTAP database for India and Bangladesh. From this table, we can observe that income levels considerably same in both the economies. Moreover, while the India's exports and imports accounts for about 90 percent of the total exports, and imports.

Table 1. Basic Statistics of Economics

Country	GDP(US\$ million)	Per Capita GDP (US\$ million)	Population (Million)	Exports (US\$ million)	Imports (US\$ Million)
India	477342.16	462.48	1032.13	61125.46	67355.54
Bangladesh	46705.93	353.65	132.07	7920.74	8675.76

Table 2 provides an overview of the average import tax rates levied by Bangladesh and India by source. The average import tax imposed amongst the countries is 19.4 percent by Bangladesh and 31.9 percent by India.

Table 2. Import Taxes by Source

S/N	Code	Country	Import Tax Rate, Mean % ad valorem rate
1	BGD	Bangladesh	19.4
2	IND	India	31.9

Although SAFTA has been formed there is a fear among the lesser developed countries believing that the gain will be minimal in comparison to countries like India and Pakistan. But the past experience of trading blocs has shown both the small and big partners gain from free trade. In fact, India Sri Lanka FTA has lead to not only growth in investment but also deeper regional co-operation in political front. Thus the FTA dispels the myth that in a FTA of a small and large country only the large country gain not both. (Kalegama, 2006) Reduction or elimination of trade barriers within the region is of course important in establishing a free trade agreement. Considering that intraregional trade has already grown dramatically in East Asia, Bangladesh and India is expected to have a wider range of elements, comprehensively covering not only trade liberalization but also trade and investment facilitation measures such as simplification of customs clearance procedures and mutual recognition of standards as well as technical

cooperation. Therefore, this analysis investigates the effects of measures to facilitate trade and investment in these countries as well as technical assistance, in addition to the effects of elimination (or reduction) of trade barriers.

Regarding trade liberalization, the effects of elimination and/or reduction of trade barriers to both exports and imports are investigated. Given the fact that both Bangladesh and India are primarily dependent on agriculture, this study attempts to discuss agriculture trade liberalization by examining scenarios not only of full trade liberalization in all sectors but also of partial trade liberalization in the agriculture sector (full trade liberalization in the non-agriculture sector and 50%-trade liberalization in the agriculture sector) as well as of exclusion of the agriculture sector from trade liberalization (full trade liberalization in only non-agriculture sectors).⁷

Implementation of various trade and investment facilitation measures is formulated in our simulation as an “import-augmenting technical change” to estimate that impacts. In the model, a positive “import-augmenting technical change” or an improvement in efficiency of importing products lowers the market price (domestic price) of imported products. Specifically, we investigate the effects of 10 percent exogenous change in this efficiency improvement. Note that five percent change in that efficiency improvement is applied to India where importing efficiency is relatively high. Technical assistance to developing countries is formulated in our simulation as an “output technical change” to analyze the effects. Specifically, we investigate the effects of one percent exogenous change in this output technical change. The scenarios with a combination of trade liberalization, various facilitation measures, and technical assistance in our simulations are as follows:

SIM1: Full trade liberalization in non-agriculture sectors

SIM2: Full trade liberalization in non-agriculture sectors and 50%-trade liberalization in the agriculture sector

SIM3: Full trade liberalization in all sectors

SIM4: Full trade liberalization and various facilitation measures in all sectors

SIM5: Full trade liberalization, various facilitation measures, and technical assistance in all sectors

Based on the results of these simulations, we discuss the significance of the Indo Bangla FTA framework, focusing on the effects of trade liberalization, various facilitation measures, and technical assistance to Bangladesh in the next section.

5. Results of the simulation analysis

Tables 3-9 display our estimates of the effects on GDP, exports, imports and production. SIM1, SIM2 and SIM3 provides interesting insights that gains in terms of GDP for India is higher. SIM4 and SIM5 formulated them as a positive “import-augmenting technical change” (technical improvement) and assumed 10 percent (or five percent) exogenous change in efficiency improvement to estimate their impacts. Compared their results with those of SIM1 to SIM5 (including facilitation measures), the magnitude of the economic impacts is apparently larger.

Table 3. Effects on GDP of India and Bangladesh

Country	SIM1	SIM2	SIM3	SIM4	SIM5
India (% change)	0.05	0.06	0.07	-0.08	-0.01
Bangladesh (% change)	-0.02	-0.03	-0.05	-0.58	-0.31

Table 4. Effects on Exports after Simulations (India)

	SIM1	SIM2	SIM3	SIM4	SIM5
Sectors	% change	% change	% change	% change	% change
1 Grains & Crops	-0.14	0.51	1.16	-1.03	0.07
2 Livestock & Meat Production	-0.27	-0.41	-0.55	0.54	-0.01
3 Mining & Extraction	0.03	0.02	0.02	-0.30	-0.14
4 Process Food	0.13	0.09	0.06	-0.29	-0.12
5 Textiles & Clothing	0.31	0.26	0.21	0.08	0.15
6 Light Manufacturing	0.01	-0.01	-0.03	0.12	0.05
7 Heavy Manufacturing	0.13	0.11	0.10	-0.45	-0.18
8 Utility & Consumables	-0.14	-0.16	-0.17	0.21	0.02
9 Transport & Communication	-0.12	-0.13	-0.15	0.17	0.01
10 Other Services	-0.13	-0.14	-0.15	0.19	0.02
Total	0.06	0.07	0.08	-0.13	-0.02

Table 5. Effects on Exports after Simulations (Bangladesh)

	SIM1	SIM2	SIM3	SIM4	SIM5
Sectors	% change	% change	% change	% change	% change
1 Grains & Crops	-0.03	1.36	2.76	-1.80	0.48
2 Livestock & Meat Production	0.00	0.62	1.56	-2.80	-0.62
3 Mining & Extraction	0.68	0.42	0.17	-23.78	-11.79
4 Process Food	0.22	0.43	0.63	-0.09	0.27
5 Textiles & Clothing	0.61	0.84	1.07	-0.08	0.49
6 Light Manufacturing	0.43	0.33	0.24	0.43	0.33
7 Heavy Manufacturing	1.70	1.57	1.45	-7.18	-2.87
8 Utility & Consumables		-0.25	-0.25	0.76	0.25
9 Transport & Communication	-0.05	-0.13	-0.22	0.93	0.36
10 Other Services	-0.07	-0.16	-0.25	1.17	0.46
Total	0.54	0.72	0.90	-0.23	0.33

Table 6. Effects of Imports after Simulations (India)

	SIM1	SIM2	SIM3	SIM4	SIM5
Sectors					
1 Grains & Crops	-0.14	0.38	0.90	-1.61	-0.36
2 Livestock & Meat Production	-0.27	-0.41	-0.56	0.54	-0.01
3 Mining & Extraction	0.05	0.04	0.04	-0.48	-0.22
4 Process Food	0.07	0.03	0.00	-0.39	-0.20
5 Textiles & Clothing	0.28	0.23	0.18	-0.03	0.07
6 Light Manufacturing	0.02	0.00	-0.02	0.05	0.01
7 Heavy Manufacturing	0.11	0.10	0.08	-0.58	-0.25
8 Utility & Consumables	-0.14	-0.16	-0.17	0.21	0.02
9 Transport & Communication	-0.12	-0.13	-0.15	0.17	0.01
10 Other Services	-0.13	-0.14	-0.15	0.19	0.02
Total	0.06	0.06	0.07	-0.26	-0.09

Table 7. Effects of Imports after Simulations (Bangladesh)

Sectors	SIM1	SIM2	SIM3	SIM4	SIM5
1 Grains & Crops	-0.03	1.25	2.55	-2.46	0.04
2 Livestock & Meat Production	0.00	0.87	1.74	-3.19	-0.87
3 Mining & Extraction	0.65	0.39	0.15	-23.73	-11.79
4 Process Food	0.22	0.43	0.64	-0.15	0.24
5 Textiles & Clothing	0.62	0.85	1.08	-0.12	0.48
6 Light Manufacturing	0.42	0.32	0.23	0.33	0.28
7 Heavy Manufacturing	1.63	1.50	1.37	-8.12	-3.37
8 Utility & Consumables	0.00	-0.25	-0.25	0.76	0.25
9 Transport & Communication	-0.05	-0.13	-0.22	0.93	0.36
10 Other Services	-0.07	-0.16	-0.25	1.17	0.46
Total	0.55	0.73	0.92	-0.34	0.29

Table 8. Effects on value of output after Simulations (India)

Sectors	SIM1	SIM2	SIM3	SIM4	SIM5
1 Grains & Crops	0.04	0.09	0.13	-0.13	0.00
2 Livestock & Meat Production	0.04	0.06	0.08	-0.09	0.00
3 Mining & Extraction	-0.01	-0.01	-0.01	-0.01	-0.01
4 Process Food	0.05	0.05	0.06	-0.08	-0.01
5 Textiles & Clothing	0.13	0.11	0.10	0.01	0.06
6 Light Manufacturing	0.02	0.02	0.01	0.00	0.01
7 Heavy Manufacturing	0.03	0.02	0.02	-0.07	-0.03
8 Utility & Consumables	0.05	0.05	0.06	-0.08	-0.01
9 Transport & Communication	0.05	0.05	0.05	-0.06	-0.01
10 Other Services	0.03	0.04	0.04	-0.05	-0.01
Total	0.04	0.05	0.05	-0.07	-0.01

Table 9. Effects on value of output after Simulations (Bangladesh)

Sectors	SIM1	SIM2	SIM3	SIM4	SIM5
1 Grains & Crops	0.02	-0.19	-0.41	0.41	0.00
2 Livestock & Meat Production	-0.04	-0.15	-0.27	-0.06	-0.16
3 Mining & Extraction	-0.08	-0.05	-0.03	-0.47	-0.25
4 Process Food	-0.12	-0.10	-0.09	0.14	0.03
5 Textiles & Clothing	0.12	0.32	0.52	0.15	0.34
6 Light Manufacturing	-0.47	-0.47	-0.47	0.54	0.03
7 Heavy Manufacturing	-0.31	-0.33	-0.36	1.00	0.32
8 Utility & Consumables	0.08	0.12	0.15	-0.67	-0.26
9 Transport & Communication	-0.01	0.01	0.04	-0.41	-0.19
10 Other Services	0.00	0.02	0.04	-0.69	-0.32
Total	-0.02	-0.01	-0.01	-0.13	-0.07

As the results of SIM1 to SIM5 suggest, full/partial trade liberalization does yield a certain degree of economic effects. However, trade liberalization has already proceeded to a considerable degree except a few sectors in both countries. Both the countries has some form of border trade, therefore, the economic effects through trade liberalization only are likely to be limited. Apart from trade liberalization other various facilitation measures is also important. An efficiency improvement in imports indicates reduction of service-link costs connecting fragmented production blocs across borders. If cross-border service-link costs are reduced by various facilitation measures, economic welfare development can be feasible.

The technical assistance also brings significant economic impacts to Bangladesh From Table 5 and 6, it can be inferred that Bangladesh gains with technical assistance specially in the export and import of textiles and clothing sector. Compared the results of SIM4 with those of SIM5, we can observe a pronounced economic impacts on both countries as recipients of that assistance. A comprehensive FTA covering not only trade liberalization including other facilitation and technical assistance is likely to have much greater impacts.

In the agriculture related trade liberalization , the analysis examined scenarios of full trade liberalization in non-agriculture sectors (SIM1), partial trade liberalization in the agriculture sector with full trade liberalization in non-agriculture sectors (SIM2), and full trade liberalization in all sectors including agriculture (SIM3 to SIM5). The outcomes of agricultural liberalisation show that exports of livestock increases with facilitation and technical assistance to Bangladesh from India(SIM4, Table 4). The sectors of manufacturing gains the predominantly in comparison to service sector.

Table 4 to 9 shows by-sector impacts of the Indo-Bangla with full trade liberalization, various facilitation measures, and technical assistance to developing countries on production, exports, and imports (SIM1 to SIM5). In terms of imports, a substantial increase is observed in all sectors for Bangladesh and India. Both the countries tend to experience a considerable increase in imports in sectors such as processed food, textiles and apparel, manufacturing and utility and consumables which are typically protected by high tariffs. These results contribute to further strengthen trade linkages in many sectors. In terms of outputs(table 8 and 9), while value of output increases marginally, production as a whole economy never shrinks as indicated by growth of real GDP, even though sector results shows existence of some sectors in which production declines. It could be concluded that although structure of economies significantly changes towards efficient system through trade liberalization, with facilitation measures, and technical assistance.

6. Conclusion

This study examines the economic effects of Indo-Bangla free trade by using a simulation analysis using a CGE model to assess the significance of the trade. The simulations focused on the effects of trade liberalisation in sectors using agricultural, non agricultural sectors and facilitation and technical assistance. The results were in the form of five scenarios which were presented in tables 3 to 9.

The study indicated that trade liberalization such as elimination/reduction of tariffs is important. In order to further facilitate trade liberalisation, not only reducing tariffs but facilitation measures and technical assistance is also required in various sectors. Furthermore, development of more cross border trade with Bangladesh will enhance the trade with the North East India and mainland India. In addition, if more cross-border service-link costs are reduced through various facilitation measures, then there could be international production/distribution networks in South and South-east Asia can be further developed.

The simulation scenarios of full trade liberalisation in all sectors as well as non agricultural sectors demonstrated that India and Bangladesh gains in the sectors of manufacturing both heavy and light as well as to some extent in the agriculture sector. The service sector shall gain from the facilitation measures as well as technical assistance provided. Facilitation and technical assistance gain is likely for the lesser developed country. As for trade liberalization, we investigated not only scenarios of full trade liberalization in all sectors including agriculture but also those of full trade liberalization in only non-agriculture sectors and those of partial trade liberalization in the agriculture sector with full trade liberalization in non-agriculture sectors. Our results clearly demonstrated that positive economic effects are greater in scenarios of partial liberalization of trade in the agricultural sector than in scenarios of exclusion of that sector from trade liberalization, and are the greatest in scenarios of trade liberalization in all sectors including agriculture.

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Table A.1 Aggregated Regions

Sl. No.	Code	Country
1	BGD	Bangladesh
2	IND	India

Table A.2 Aggregated Sectors

Sl. No.	Sector Description	Comprising old sectors
1	Grains and Crops	Paddy, wheat, cereal grains, Vegetables, fruits, nuts, oil seeds, sugar canes, beet sugar, plant based fibres, crops, processed rice etc.

2	Livestock and Meat Products	Cattle, sheep, goats, horses, animal products, raw milk, wool, silk-worms cocoons, meat and meat products.
3	Mining and Extraction	Forestry, fishing, coal, oil, gas and minerals.
4	Processed Food	Vegetable oils & fats, dairy products, sugar, food products, beverages & tobacco products,
5	Textiles and Clothing	Textiles and Wearing apparel.
6	Light Manufacturing	Leather products, wood products, paper products, publishing, metal products, motor vehicles & parts, transport equipments, manufactures
7	Heavy Manufacturing	Petroleum, coal products, chemical, rubber, plastic products, Mineral products, Ferrous metals, metals, electronic equipments, machinery & Equipments etc.
8	Utilities and Construction	Electricity, gas manufactures, distribution, water, construction.
9	Transport and Communication	Trade, transport, sea transport, air transport, communication.
10	Other Services	Financial services, insurance, business service, recreation& other services, public administration, defence, health, education and dwellings.

“Reconciling The Theory of Efficient Market Hypothesis in The Era of Recession 2007”

(An Empirical Evidence from National Stock Exchange)

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Abstract

The Indian stock market has faced many challenges in last decades. A number of scams like Harshad Mehta- scam, Ketan Parekh scam and lots more compel regulators to take corrective action. After each of the crash market corrected itself. In the middle of earlier decade the subprime crisis led recession ruined the market. The most affected sectors were infrastructure, Information technology, capital market and a cascading effect of it on every sector and business. The major market BSE an NSE both crashed in a tragic manner. Millions of investors got affected due to this recession. The level of confidence in stock market reduced. This study will check the efficiency level in the National Stock

Exchange during the recession phase. It is divided in to three phase pre – during- post recession stage. CNX S&P Nifty will be taken as the basis to see the impact of this turmoil.

“Reconciling The Theory of Efficient Market Hypothesis in The Era of Recession 2007”

(An Empirical Evidence from National Stock Exchange)

INTRODUCTION

The efficient markets hypothesis (EMH), popularly known as the Random Walk Theory, is the proposition that current stock prices fully reflect available information about the value of the firm, and there is no way to earn excess profits, (more than the market overall), by using this information. It deals with one of the most fundamental and exciting issues in finance – why prices change in security markets and how those changes take place. It has very important implications for investors as well as for financial managers.

The first time the term "efficient market" was in a 1965 paper by E.F. Fama who said that in an efficient market, on the average, competition will cause the full effects of new information on intrinsic values to be reflected "instantaneously" in actual prices. Many investors try to identify securities that are undervalued, and are expected to increase in value in the future, and particularly those that will increase more than others. Many investors, including investment managers, believe that they can select securities that will outperform the market. They use a variety of forecasting and valuation techniques to

aid them in their investment decisions. Obviously, any edge that an investor possesses can be translated into substantial profits.

FINANCIAL CRISIS AND CURRENT MARKET HYPOTHESIS

The recent global financial crisis has led to renewed scrutiny and criticism of the hypothesis. Market strategist Jeremy Grantham has stated flatly that the EMH is responsible for the current financial crisis, claiming that belief in the hypothesis caused financial leaders to have a "chronic underestimation of the dangers of asset bubbles breaking". Noted financial journalist Roger Lowenstein blasted the theory, declaring "The upside of the current Great Recession is that it could drive a stake through the heart of the academic nostrum known as the efficient-market hypothesis." At the International Organization of Securities Commissions annual conference, held in June 2009, the hypothesis took center stage. Martin Wolf, the chief economics commentator for the Financial Times, dismissed the hypothesis as being a useless way to examine how markets function in reality. Paul Mc Culley, managing director of PIMCO, was less extreme in his criticism, saying that the hypothesis had not failed, but was "seriously flawed" in its neglect of human nature. The financial crisis has led Richard Posner, a prominent judge, University of Chicago law professor, and innovator in the field of Law and Economics, to back away from the hypothesis and express some degree of belief in Keynesian economics. Posner accused some of his 'Chicago School' colleagues of being "asleep at the switch", saying that "the movement to deregulate the financial industry went too far by exaggerating the resilience - the self healing powers - of laissez-faire capitalism." Others, such as Fama himself, said that the hypothesis held up well during the crisis and that the markets were a casualty of the recession, not the cause of it.

OBJECTIVE OF THE STUDY

The main objective of this study to examine the efficiency of the NSE during the period of recession. Further the study is focused to find out whether the NSE follows the random walk hypothesis. More specifically this study is directed to meet the following objectives

- i. To determine the Whether the NSE is weak form efficient or follows a random walk model and the investors cannot earn abnormal returns on the basis of historical information of the stocks.
- ii. If so further to examine the consistency of the efficient market behaviour during the period of recession

METHODOLOGY

The empirical analysis of the study uses daily market return of the National Stock Exchange for the period of 1 Sep, 2005 to 31 mar 2011, Observatiopn-1381. The data of daily price indices are collected from the NSE website for the period of 2005-2011. There are some models such as autocorrelation coefficient and augmented dickey fuller test have been employed to confirm the results and to build up a predictive model.

Data Collection

Observations are daily closing values of nifty for which are a standard index of National Stock Exchange (NSE). Observations are taken for the period September 2005 to 31 mar 2011 from the website www.nseindia.org.

Calculation of daily returns

Market returns are computed as follows.

$$R_t = \ln (P_t / P_{t-1})$$

P_t = market Price at time 't'

P_{t-1} =market Price at time 't-1'

Further the study has been divided into three phase to check the random character of the index during the recession and post recession.

Stationary check of the data through Augmented Dickey–Fuller Test

Augmented Dickey–Fuller (ADF) test is the most popular stationary test. It was presented by the statisticians David Alan Dickey and Wayne Arthur Fuller in 1979. and 1981. ADF test is used to test the unit root hypothesis. If one time series has unit root that means it is nonstationary and it follows random walk. Test is based on two possible equations:

$$\Delta Y_t = \delta Y_{t-1} + u_t \quad \text{or} \quad Y_t = \rho Y_{t-1} + u_t$$

Where null hypothesis can be defined on two ways: $H_0 := 0$ or $H_0 := 1$

Autocorrelation Test

The autocorrelation of a random process describes the correlation between values of the process at different points in time, as a function of the two times or of the time difference. Let X be some repeatable process, and i be some point in time after the start of that process. (i may be an integer

for a discrete-time process or a real number for a continuous-time process.) Then X_i is the value (or realization) produced by a given run of the process at time i . Suppose that the process is further known to have defined values for mean μ_i and variance σ_i^2 for all times i . Then the definition of the autocorrelation between any two time s and t is

$$R(s, t) = \frac{E[(X_t - \mu_t)(X_s - \mu_s)]}{\sigma_t \sigma_s},$$

where "E" is the expected value operator. Note that this expression is not well-defined for all time series or processes, because the variance may be zero (for a constant process) or infinite. If the function R is well-defined, its value must lie in the range $[-1, 1]$, with 1 indicating perfect correlation and -1 indicating perfect anti-correlation.

If X_t is a second-order stationary process then the mean μ and the variance σ^2 are time-independent, and further the autocorrelation depends only on the difference between t and s : the correlation depends only on the time-distance between the pair of values but not on their position in time. This further implies that the autocorrelation can be expressed as a function of the time-lag, and that this would be an even function of the lag $\tau = s - t$. This gives the more familiar form

$$R(\tau) = \frac{E[(X_t - \mu)(X_{t+\tau} - \mu)]}{\sigma^2},$$

LITERATURE SURVEY ON RANDOM WALK THEORY

The random walk model was first developed by Bachelier (1900) in which he asserted that successive price changes between two periods is independent with zero mean and its variance is proportional to the interval between the two time periods. Accordingly, the variance of weekly changes should be five times the variance of the daily changes (assuming the market remains closed on weekends). This concept is exploited in the variance ratio tests, which has been widely used to test the random walk hypothesis in various markets. The study of rejection of random walk in the share prices due to mean

reverting tendency which is a consequence of persistence of one sided volley in share prices was first presented by De Bondt & Thaler (1985). The presence of mean reverting tendency and absence of random walk in US stocks was confirmed by the studies of De Bondt & Thaler (1989) and Poterba & Summers (1988).

Large number of empirical tests has been applied in the literature to investigate the acceptability and validity of EMH and the RWM. Regarding to the scenario of Pakistan Hasan, Shah and Abdullah (2007) examined the weak-form market efficiency of Karachi Stock Exchange (KSE). The results reveal that prices behavior is not supporting random walks and hence these are not weak-form efficient. For such situation technical analysis may be helpful in predicting equity markets behaviors in the short run. The prior empirical findings are based upon the data of developed equity markets and hence it implies that the security prices are reacting immediately to all publicly available information.

In a recent study conducted by Borges (2008) on the equity markets of France, Germany, UK, Greece, Portugal and Spain, for the period January 1993 to December 2007. They used a serial correlation test, an augmented Dickey-Fuller test, a runs test and the Lo and MacKinlay (1988) multiple variance ratio to test the random walk in equity markets. The results provide insignificant evidences that monthly prices and returns follow RWM in all six equity markets. Daily returns are abnormally distributed as indicated by the negative skeweness and leptokurtic. France, Germany, UK and Spain follow the random walk with daily data but that hypothesis rejects random walk hypothesis for Greece and Portugal. The reason is due to serial positive correlation. But after year 2003 these two countries also allows random walk behavior. No doubt that there are number of studies on the efficient market hypothesis to test the randomness of stock prices of individual companies but still there are enough gaps in the study regarding to test the random walk of equity market indices around the globe in present era. Therefore the Asian-Pacific markets have been selected to test the market efficiency of various emerging and developed markets in the region.

Iqbal and Mallikarjunappa, T. (2007) tested market reaction to quarterly earnings announcement of 149 companies listed on the Bombay Stock Exchange for September 2001 by employing both parametric and nonparametric tests. It is observed that during event window, runs test are not significant at 5% level, which signifies that abnormal returns occur randomly. Yalama, Abdullah and Selik, Sibel (2008) investigated semi-strong form efficiency in Istanbul Stock Exchange market (ISE-100), Foreign Exchange market (FEM) and Inter-bank Money market (IMM) in respect to changes in Currency and Circulation (CIC). The data consist of the daily frequency over the period 1990-2008 which was analyzed by employing Toda Yamamoto Causality method. The study concludes that there is the causality relationship running from CIC to FEM and CIC to IMM. However, there is no causality relationship running from CIC to ISE-100. This result implies that in Turkey money market is semi-strong form

efficient while capital market is not. Dhar, Satyajit and Chhaochharia, Sweta (2008) analyzed the impact of the information relating to the announcement of stock split and bonus issue on stocks listed on National Stock Exchange (NSE) by employing event study. Both the events, that is stock split and bonus issue reflect significantly positive announcement effect. For bonus issues, the abnormal return was about 1.8% and for stock splits it was about 0.8%. Thereby the study supports the view that Indian Stock market is efficient in semi-strong form.

Pichardo, Christine and Bacon, Frank (2009) examined the effect of Lehman Brother's Bankruptcy on the overall market by taking stock price's risk adjusted rate of return for 15 selected brokerage firms. Statistical tests proved that the bankruptcy had a negative impact on stock price's risk adjusted rate of return for the 15 firms, which supports the semi-strong market efficiency theory. Even after the event, bankruptcy continued to affect the market. Some of the studies have also been made on the FII's impact on Indian Capital market Separately i.e; not in the context of testing semi-strong form of EMH only analyzing the influence of FII's on Indian Capital market.

EMPIRICAL EVIDENCES

Data Analysis for Whole Era

To check the dependence in the daily return series of NSE nifty the autocorrelation coefficients from 1 to 16 were calculated. As autocorrelation is an effective tool to measure the level of independence in the successive return of the daily observations of stock index, a value near to zero shows that there is a high degree of independence in the successive daily return series and it is not possible to predict the future on the basis of past trends.

Lag detail, have shown significantly different from zero autocorrelation coefficients @ 5 % level of significance and there were only (Lags 1, 6, and 8) significance autocorrelation coefficients showing positive and negative dependence over the nifty return series on these values. Although the autocorrelation coefficients results did not fully support the weak form efficiency, but it gave strong evidences in favor of independence in the daily return series of NSE nifty index. The lags validated the statement of null hypothesis of independence in the successive movement of the index return series from its previous one. As reported in table-1 out of 16 lags, 5 (2, 3, 4, 5 and 6) lags have negative autocorrelation coefficients. It validates that the returns have a tendency toward reversal.

Lags	Nifty	Lags	Nifty
1	0.052	9	0.011
2	-0.02	10	0.002
3	-0.017	11	0
4	-0.02	12	0.01
5	-0.03	13	0.037
6	-0.053	14	0.038
7	0.028	15	0.04
8	0.078	16	0.026

Table 1: Result of Autocorrelation Test for overall duration NSE nifty

(1 Sep, 2005 to 31 mar 2011, Observatiopn-1381)

But the result illustrated through unit root test were not even partially supported that what has been reported by the autocorrelation coefficient. The result of unit root test has shown in table-2. In this result we can see that the null hypothesis has been rejected because the critical value is more than the tabulated value. According to the unit root test it is determined that the daily return of the index has the stationary nature and it is independent in nature.

Null Hypothesis : NSE nifty daily return has a unit root			
Exogenous: Constant			
Lag Length: 0 (Automatic based on SIC, MAXLAG=23)			
		t-Statistic	Prob.*
Augmented Dickey Fuller test statistic		-35.2583	0
Test critical values:		1% level	-3.43488
		5% level	-2.86343
		10% level	-2.56782

*MacKinnon (1996) one-sided p-values.

Table 2: Result of Augmented Dickey Fuller test for overall duration NSE nifty

(1 Sep, 2005 to 31 mar 2011 Observation -1381)

But the result illustrated through unit root test were not even partially supported that what has been reported by the autocorrelation coefficient. The result of unit root test has shown in table-2. In this result we can see that the null hypothesis has been rejected because the critical value is more than the tabulated value. According to the unit root test it is determined that the daily return of the index has the stationary nature and it is independent in nature.

(Note : Correlograms for the period of 1 Sep, 2005 to 31 mar 2011 Observation -1381 depicted in fig -3)

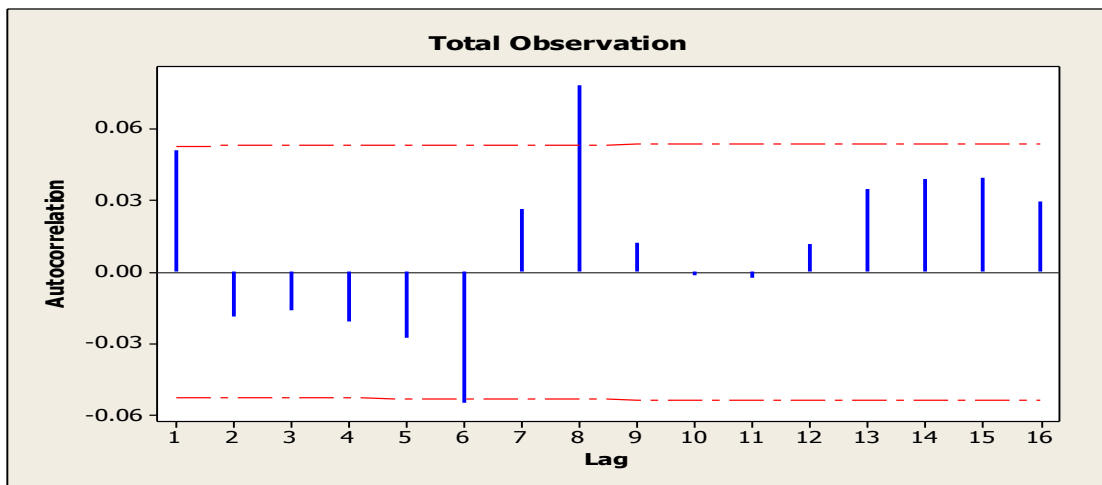


Fig 3: Correlograms for overall duration for NSE nifty

(1 Sep, 2005 to 31 mar 2011 Observation -1381)

When we plotted all the data on a time line than in a normal view it provides evidence that in the pre recession phase and post recession phase the return are consistent in nature. But in during recession phase the returns are more inconsistent.

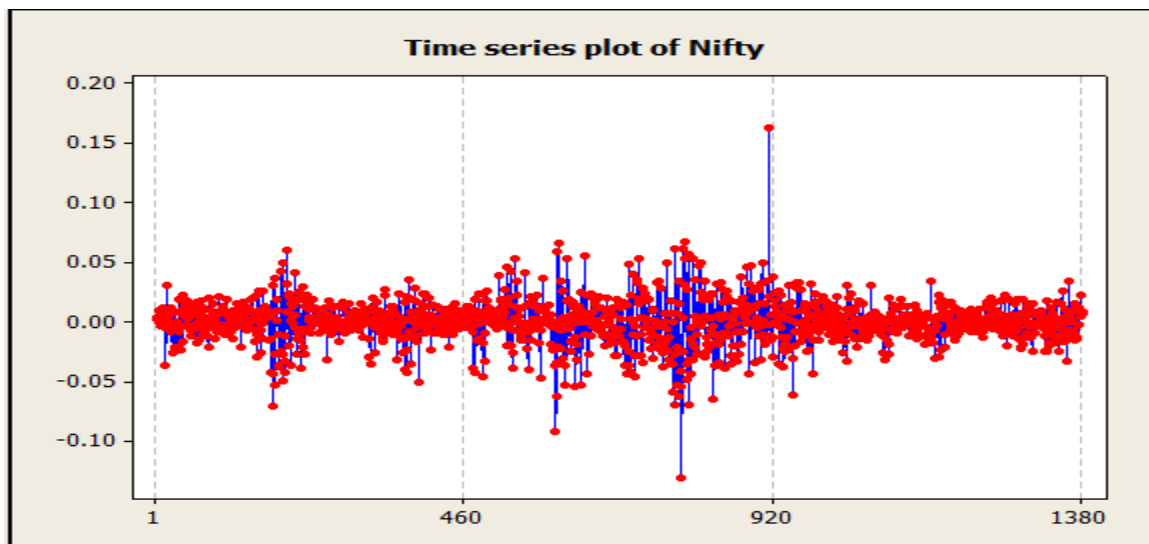


Fig 4: Time series for overall duration for NSE nifty

(1 Sep, 2005 to 31 mar 2011 Observation -1381)

Evidence Of Random Walk Theory for Pre and Post era of Recession

Pre recession Phase (1-Sep-05 to 11-Jul-07)

The result of Autocorrelation coefficient (AC) and Augmented Dickey Fuller Test this phase has been depicted in the table-3 and table-4 respectively. In AC out of 16 lags there are 7 lags have found to be negative characters. But all the values of AC seem to be near by zero. Hence it is depicted that before the appearance of recession NSE nifty return were no dependence over the previous series of index return. It has independent character.

Lags	Nifty	Lags	Nifty
1	0.039	9	0.035
2	-0.05	10	0.045
3	-0.038	11	-0.022
4	0.023	12	-0.032
5	0.069	13	0.058
6	-0.021	14	0.048

7	-0.035	15	0.037
8	0.006	16	-0.085

Table 3: Result of Autocorrelation Test for pre recession phase of NSE nifty

(1 Sep, 2005 to 11 July 2007, Observation -462)

Further the study of the unit root test we applied the Augmented Dickey Fuller Test the result of the test depicted in the table-4. The result of ADF test also supported the previous evidence of the existence of random walk theory. It supported the weak efficiency and indicates a stationary time series with random behavior in the NSE nifty daily return.

Null Hypothesis: RETURN has a unit root			
Exogenous: Constant			
Lag Length: 0 (Automatic based on SIC, MAXLAG=23)			
		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-20.591	0
Test critical values:	1% level	-3.444311	
	5% level	-2.86759	
	10% level	-2.570055	
*MacKinnon (1996) one-sided p-values.			

Table 4: Result of Augmented Dickey Fuller test for pre recession phase of NSE nifty

(1 Sep, 2005 to 11 July 2007, Observation -462)

(Note: Correlograms for the period of 1 Sep, 2005 11 July 2007, Observation -462 depicted in fig -4)

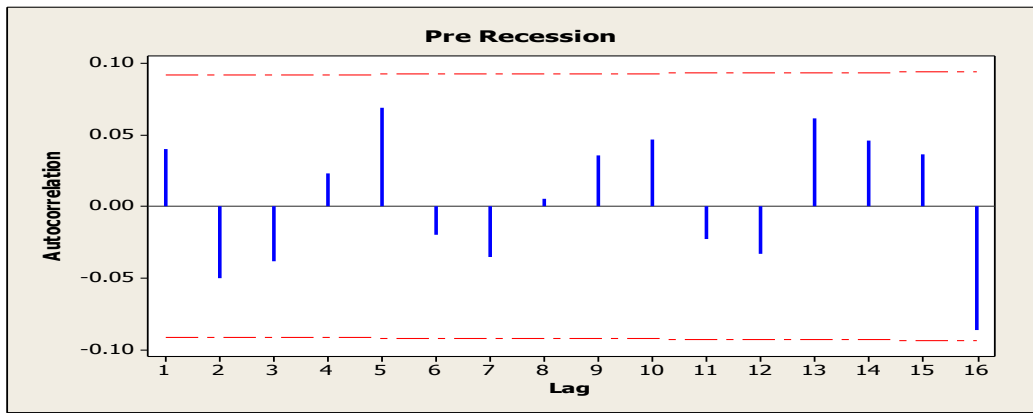


Fig 5: Pre recession phase Correlograms of NSE nifty

(1 Sep, 2005 to 11 July 2007, Observation -462)

During Recession Phase (12-July-07 to 29- May-09)

In the recession phase it does not show any biasness in the movement of the daily return of the NSE nifty. It shows complete independence in the successive movement from the previous series. Except lag 8 there are no evidence of dependence. All the values of AC are near to zero. Eight lags (lag 2,3,4,5,6,9,10 and 11) are found to be negative but all the values are significantly different from the zero. Further we can see during the recession it is found that there is independent return character in NSE Nifty series.

Lags	Nifty	Lags	Nifty
1	0.065	9	-0.006
2	-0.026	10	-0.028
3	-0.011	11	-0.005

4	-0.045	12	0.024
5	-0.056	13	0.036
6	-0.045	14	0.078
7	0.041	15	0.011
8	0.102	16	0.057

Table 5: Result of Autocorrelation Test for during recession phase of NSE nifty

(12 July, 2007 to 29 May 2009, Observation -460)

Results in the table-4 are based on the ADF model. The value of ADF statistics is -19.9807 and this value is significantly higher than the critical table values at 1%, 5% and 10% significance level. The Null hypothesis is rejected. Time series NSE Nifty return is stationary and it doesn't have a unit root.

Null Hypothesis: RETURN has a unit root			
Exogenous: Constant			
Lag Length: 0 (Automatic based on SIC, MAXLAG=23)			
		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-19.9807	0
Test critical values:	1% level	-3.44437	
	5% level	-2.86762	
	10% level	-2.57007	
*MacKinnon (1996) one-sided p-values.			

Table 6 Result of Augmented Dickey Fuller test for during recession phase of NSE nifty

(12 July, 2007 to 29 May 2009, Observation -460)

(Note : Correlograms for the period 12 July, 2007 to 29 May 2009, Observation -460 depicted in fig -5)

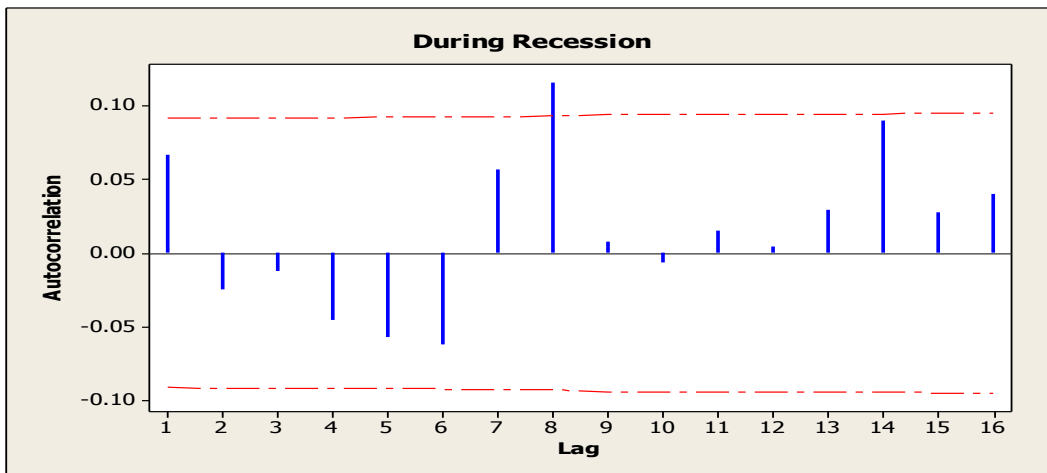


Fig 6: During recession phase Correlograms of NSE nifty

(12 July, 2007 to 29 May 2009, Observation -460)

Post recession Phase (1-June-07 to 31- mar -11)

The autocorrelation function (ACF) test is examined to identify the degree of autocorrelation in a time series. It measures the correlation between the current and lagged observations of the time series of stock returns. Now after recession phase we can assess that there is no evidence of the dependence over the successive series return. All 16 lag result are showing the independence nature and free from any type of biasness over historical data.

Lags	Nifty	Lags	Nifty
1	0.002	9	-0.01
2	0.039	10	-0.008
3	-0.013	11	-0.044
4	0.015	12	0.08
5	-0.055	13	0.03
6	-0.064	14	-0.09
7	-0.005	15	0.043

8	-0.011	16	0.036
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Table 7: Result of Autocorrelation Test for post recession phase of NSE nifty

(1 June, 2009 to 31 mar 2011, Observation -460)

Now the study of the unit root test the result of Augmented Dickey Fuller Test also supported the previous evidence of the existence of random walk theory. It supported the weak efficiency and indicates a stationary time series with random behavior in the NSE nifty daily return. The critical value of the ADF Test is more than the tabulated value of 't' statistics @ 1%, 5% and 10%.

Null Hypothesis: RETURN has a unit root		
Exogenous: Constant		
Lag Length: 0 (Automatic based on SIC, MAXLAG=23)		
		t-Statistic
Augmented Dickey-Fuller test statistic		-21.3034
Test critical values:	1% level	-3.44437
	5% level	-2.86762
	10% level	-2.57007
*MacKinnon (1996) one-sided p-values.		

Table 8: Result of Augmented Dickey Fuller test for post recession phase of NSE nifty

(1 June, 2009 to 31 mar 2011, Observation -460)

(Note : Correlograms for the period 1 June, 2009 to 31 mar 2011, Observation -460 depicted in fig -6)

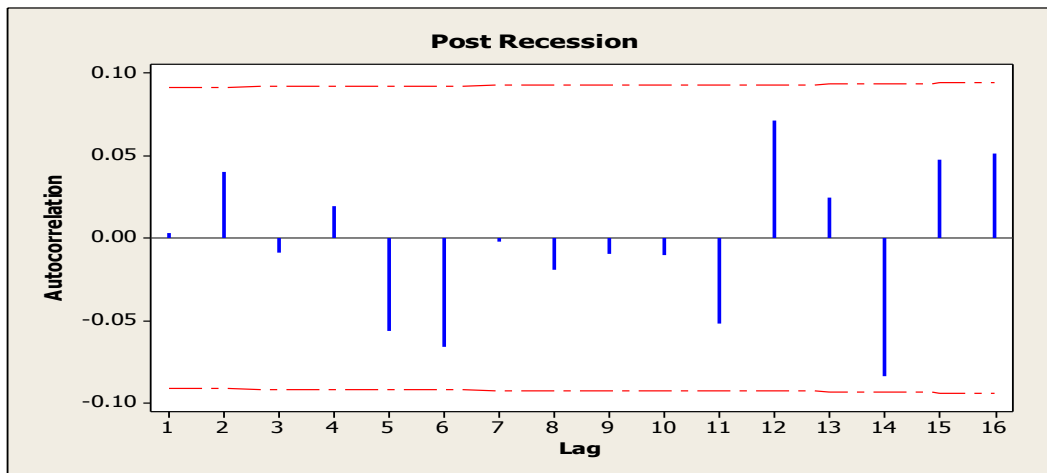


Fig 7: Post recession phase Correlograms of NSE nifty

(12 July, 2007 to 29 May 2009, Observation -460)

FINDINGS AND CONCLUSION

The study period considered under the present study consist of the time when the NSE gain momentum and there after faced fall in the return due to Sub prime crisis which led to recession. Experiment was done to make it as standardize as any other developed market. The trading norms are made transparent so that all market participants could have assessed to all relevant information. The present study makes an attempt to identify the clues of random walk theory in the behavior of the succession of market return.

The major findings of the study are classified in the following points.

- a) National Stock Return's for the period of 1 Jun 2005 to 31 mar 2011 are stationary in nature or doesn't have the unit root. We applied the Augmented Dickey Fuller Test and it rejected because the critical value is higher than the tabulated value at 5 % of significance level.
- b) Further using one of traditional tool for the checking of autocorrelation between various lags we come to know that there is no strong evidence of weak efficient hypothesis still there is independence in the successive return. Hence we can say that investors cannot earn the abnormal return having the information. All the lags except 1, 6 and 8 seem to be near by zero which validates the statement of independence.

- c) Now further the study has been divided in to three phase to check the efficiency level in recession to see the effect of abnormal profits possibility due to information.-
- a) Pre Recession Phase- We applied Augmented Dickey fuller to test the unit root nature and we find that return for the period is stationary. Further we applied Autocorrelation to find out the independent spirit in return series. Out of 16 lags 7 lags are found negative character which shows the high expectation of the investors. Except lag 3,5,13 and 16 all lags are found to be different from zero. Hence we can say that returns of NSE nifty for pre recession phase are independent in nature.
- ii) During Recession – After applying ADF test we come to know that the data we have stationary in nature. Now we apply AC test we find that during recession investor having high expectation. Out of 16 lags 8 lags are found negative. We found that there is continuous negative autocorrelation in the return series. Few lags 1,5,14 and 16 are having values to be considered but all the values are far different from zero which shows that return for the recession period is independent. There was no chance to earn abnormal profit.
- ii) Post Recession – By using ADF test we come to know that all the observations of the NSE nifty were stationary. Autocorrelation results shows that all the return have no relation with the successive returns except lag 6, 12, and 14.

The findings of the test say that there is least possibility to develop a pattern of stock return series. And no market participant is in position to devise a superior investment strategy resulting in to abnormal profits even in the recession. If we assume that stock market is the game of information one party will loose and another will win but no party can earn the benefit of abnormal return. Besides there is no strong evidence, we can say that in all three phases the weak efficient hypothesis stands confirmed.

Although the current study period considered under the study is very long as National Stock Exchange has seen the a complete trading cycle from pre recession phase to post recession phase it shown consistent rise with higher growth rate but the swiftness in increased efficiency over the National stock Exchange. The reason of inefficiency can be various others in formations rather than historical information only, that may influence the behavior of investor resulting in to non random behavior of stock return.

The irrationality may occur because of a verity of fundamental factors used by market participants like policy regarding foreign capital, market turnover and capitalization, various other factor determin8ig the worth of growth and value stocks, various macro and micro announcement. These are known as anomalies of the stock market. So some more rigorous models should be applied to test the anomalous pattern of the stock returns to have healthier remarks on the weak form efficiency of the national stock exchange.

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FDI AND ITS CHALLENGES: AN INDIAN PERSPECTIVE

Pradeep*

Abstract: India, without exception, as in case of other developing countries, is eager to prompt of other developing countries, is eager to prompt its economic growth which compels it to accept and seek assistance of foreign direct investment (FDI). Its ability to deal with the major obstacles namely shortages of financial resources and technology and skills has made to the centre of attention for developing countries. It is the reason of the countries especially developing countries like India are battling for attracting more and more foreign direct investment. This paper examines to study the challenges faced by Indian industries to attract more FDI.

Keywords: FDI, Challenges, Infrastructure, Critical Factor.

Introduction

On the eve of Independence in 1947, India was a country at a low level of development with high incidence of poverty and inequality. The land-labour ratio was quite adverse. The economy was stagnant because of lack of capital. During the century long direct British rule the inflow of capital was not commensurate with the poor capital endowment of the country when there were apparently no political constraints on inflow to India. The low per capita income restricted the market. Foreign investment did take place, but mainly to export oriented industries such as tea, jute, coal etc. Most of the profits were repatriated and not reinvested. Such investment could not have led to growth as the objective was exploitation of the natural resources. Since the inception of centralized planning in 1951 till 1980, India followed a preventive policy regime with restrictions on investment of capital and import of capital goods by local as well as foreign firms. The policy placed restrictions on new and existing foreign direct investment through screening and preventive measures. This trend of restricted foreign direct investment continued till 1980s. Since 1991, the government of India has embarked on liberalization and economic reforms programme with a view to bring about rapid and substantial economic growth and move towards globalization of the economy. The new policies have substantially relaxed restrictions on foreign investment, industrial licensing and foreign exchange. India's share in FDI inflows is too low as compared to China, because of procedural disputes regarding land availability, environmental clearance, delays at state level in getting power and other infrastructural back up. It is also observed that the exports from developing countries are associated with international firms choosing to use a country as a target for FDI and for production destined for global markets. Sizeable

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investment flows are concentrated in the infrastructure industries, like power, refineries, telecom etc. where gestation period is long and projects take time to materialize. Political instability anti FDI lobby, social tensions, non-availability of infrastructure facilities; corruption and inefficiency of labour are some challenges in attracting FDI. The main aim of this research paper is to study various challenges for attracting FDI. In each question, various parameters have been developed. Respondents were asked to rate the parameters according to their choice. Their responses were collected, tabulated and discussed as under.

Research Methodology

The present study is based on primary data and the data has been collected through the well-structured questionnaire. A multistage sampling have been designed for this purpose. Three cities of India i.e. Delhi, Noida and Gurgaon have been selected for the present study. These are the regions where most of the multinational companies are working and these regions represent the whole country. A sample of eight companies of each region has been taken as sample for the study. These companies have been taken from each region making the number of companies to 24 in all. A sample of three persons belonging to top level management of the company have been taken. These persons have been taken from each company in all the three regions, making the number of respondents to 72 in all.

A five point Likert scale was used to measure the intensity of the managers attitudes towards the selected attributes. The respondents were asked to rate the variables, using five point Likert scale, which ranged from strongly agree to strongly disagree. A scoring system was adopted to quantify them. Score of 5, 4, 3, 2 and 1 were allotted to (1) to (5) respectively.

Result and Discussion

Question 1 deal with importance of FDI for company. The respondents were asked to select whether FDI is important for company (A_1) or not (A_2). The responses to the respondents were collected by researcher and shown in the table 4.1.

Table 1: Opinion of Respondents

Opinion (coding)	Responses (percentage)
Yes (A_1)	72 (100)
No (A_2)	0
Total	72 (100)

Table 1 depicts that 100 percent of the respondents reported that FDI is important for company. Therefore not even a single respondent told that FDI is not important for company.

Problems in Attracting FDI

Question 1B deals with the problems faced by the company in attracting FDI. The respondents were asked to select whether there is problem in attracting FDI (B₁) or not (B₂). The responses to the respondents were collected and shown in the table 2.

Table 2: Problem in attracting FDI

Opinion (coding)	Responses (percentage)
Yes (A ₁)	45 (62.5)
No (A ₂)	27 (37.5)
Total	72 (100)

Table 2 shows that highest 62.50 percent of the respondents reported that there is a problem in attracting FDI. Remaining 37.50 percent respondents reported that there is no problem in attracting FDI. It is revealed from the table that most of the companies face problems in attracting FDI.

Challenges faced by company

Question 1C deals with the various challenges faced by company. To study these factors various parameters (E₁, E₂, E₃, E₄, E₅, E₆, E₇, E₈, E₉, E₁₀) were developed by the researcher. The responses to these parameters were collected by the researcher and are shown in the table 3.

Table 3: Various challenges faced by company.

	Parameter	SA	A	N	DA	SDA	Total
1.	Lack of secured national resources in India (E ₁)	-	40 (88.89)	2 (4.44)	3 (6.67)	-	45 (100)
2.	Indian products are not globally competitive (E ₂)	9 (20)	17 (37.73)	11 (24.14)	8 (17.78)	-	45 (100)
3.	Indian trade policy regime is not encouraging (E ₃)	-	36 (80)	5 (11.11)	4 (8.89)	-	45 (100)

4.	Investment incentives are not emerging for foreign investors (E ₄)	-	29 (64.44)	10 (22.23)	6 (13.33)	-	45 (100)
5.	Policy of government is not liberal / easy for foreign investors (E ₅)	5 (11.11)	30 (66.67)	4 (8.89)	6 (13.33)	-	45 (100)
6.	Control / ownership decision of management (E ₆)	9 (20)	28 (62.22)	8 (17.78)	-	-	45 (100)
7.	Lack of industrial environment (E ₇)	8 (17.78)	25 (55.56)	7 (15.56)	5 (11.10)	-	45 (100)
8.	Stringent industrial laws (E ₈)	4 (8.89)	18 (40)	12 (26.67)	6 (13.33)	5 (11.11)	45 (100)
9.	Internal disturbances / unstable social system (E ₉)	8 (17.78)	22 (48.89)	4 (8.89)	8 (17.78)	3 (6.66)	45 (100)
10.	Lack of physical infrastructure (E ₁₀)	12 (26.67)	21 (46.67)	5 (11.10)	7 (15.56)	-	45 (100)

Note: Figures in parenthesis indicate percentages.

Table 3 indicates that majority of the respondents showed their acceptance regarding all the parameters indicating the challenges faced by the company. 88.89 percent of the respondents agreed with parameter E₁, whereas 6.7 percent respondents disagreed with them. 20 percent respondents strongly disagreed with this parameter. Highest 80 percent of the respondents agreed with the parameter E₃, whereas only 8.89 percent disagreed with this parameter. 64.44 percent respondents agreed with the parameter E₄, whereas 13.33 percent respondents disagreed with this parameter. Only 11.11 percent of the respondents strongly agreed with the parameter E₅, whereas 66.67 percent supported them. 20 percent respondents strongly agreed with the parameter E₆, whereas 62.22 percent supported them.

17.78 percent respondents strongly agreed with the parameter E₇, whereas 55.56 percent supported them. Only 8.89 percent respondents strongly agreed with the parameter E₈ and 40 percent supported them. Regarding parameter E₉, 17.78 percent respondents strongly agreed and 48.89 percent supported them. 26.67 percent respondents strongly agreed with the parameter E₁₀, whereas 46.67 percent supported them.

Table 4: Rankwise Analysis

Variable name	Reasons	Mean score	Rank
E ₁	Lack of secured national resources in India	3.82	3
E ₂	Indian products are not globally competitive	3.60	7
E ₃	Indian trade policy regime is not encouraging	3.71	6
E ₄	Investment incentives are not emerging for foreign investors	3.51	9
E ₅	Policy of government is not liberal / easy for foreign investors	3.76	5
E ₆	Control / ownership decision of management	4.02	1
E ₇	Lack of industrial environment	3.80	4
E ₈	Stringent industrial laws	3.22	10
E ₉	Internal disturbances / unstable social system	3.53	8
E ₁₀	Lack of physical infrastructure	3.84	2

Result: From the ranking of the mean score in the table 4, fourteen parameters have been identified for challenges faced by the company. Among the various parameters, control / ownership decision of management and lack of physical infrastructure are identified as most important factors which are responsible for challenges. Next important reason which ranked at number 3 is lack of secured national resources in India. Other important parameters identified according to survey are: lack of industrial environment, policy of government is not liberal / easy for foreign investors, Indian trade policy regime is not encouraging, Indian products are not globally competitive, internal disturbances / unstable social system, investment incentives are not emerging for foreign investors, stringent industrial laws.

Critical factors for attracting FDI

Question 2 deals with the critical factors for attracting FDI. To study these factors various parameters (F₁, F₂, F₃, F₄, F₅, F₆, F₇) were developed by the researcher. The responses to these parameters are collected by the researcher and shown in the table 5.

Table 5: Factors are more critical for attracting FDI

	Parameter	SA	A	N	DA	SDA	Total
1.	Business climate (F ₁)	7 (9.72)	48 (66.67)	5 (6.94)	12 (16.67)	-	72 (100)
2.	Political stability (F ₂)	24 (33.33)	40 (55.56)	-	8 (11.11)	-	72 (100)
3.	Labour laws (F ₃)	30 (41.67)	35 (48.61)	7 (9.72)	-	-	72 (100)
4.	Skilled labour (F ₄)	37 (51.39)	29 (40.28)	6 (8.33)	-	-	72 (100)
5.	India's image (F ₅)	30 (41.67)	37 (51.39)	5 (6.94)	-	-	72 (100)
6.	Infrastructure (F ₆)	32 (44.44)	22 (30.56)	8 (11.11)	10 (13.84)	-	72 (100)
7.	Economic reforms (F ₇)	30 (41.67)	24 (33.33)	8 (11.11)	4 (5.56)	6 (8.33)	72 (100)

Note: Figures in parenthesis indicate percentages.

Table 5 indicates that the majority of the respondents showed their acceptance regarding all the critical parameters for causes attracting FDI. 9.72 percent respondents strongly agreed with parameter F₁, whereas 66.67 percent supported them. Only 33.33 percent of the respondents strongly agreed with parameter F₂, whereas 55.56 percent supported them. Regarding F₃ parameter, 41.67 percent of the respondents strongly agreed and 48.61 percent supported them. Highest 51.39 percent of the respondents strongly agreed with the parameter F₄, whereas 40.28 percent supported them. Only 41.67 percent respondents strongly agreed with the parameter F₅ and 51.39 percent supported them. 44.44 percent respondents strongly agreed with the parameter F₆, whereas 30.56 percent supported them. 41.67 percent of the respondents strongly agreed with the parameter F₇ whereas 8.33 percent strongly disagreed with them.

Table 6: Rankwise Analysis

Variable name	Reasons	Mean score	Rank
F ₁	Business climate	3.69	7
F ₂	Political stability	4.11	4
F ₃	Labour laws	4.32	3
F ₄	Skilled labour	4.43	1
F ₅	India's image	4.35	2
F ₆	Infrastructure	4.06	5
F ₇	Economic reforms	3.94	6

Result: From the ranking of the mean scores in the table 6, seven parameters have been identified for attracting FDI. Among the various parameters, skilled labour and India's image are identified most important factors which are responsible for attracting FDI. Next important parameter which ranked at number 3 is labour laws. Other important reasons identified according to the survey are: political stability, infrastructure, economic reforms, business climate.

Infrastructure available in India

Question 3 deals with the infrastructure available in India. To analyse the possibilities of infrastructure available in India, various parameters (A₁, A₂, A₃, A₄, A₅, A₆, A₇) were developed by the researcher. The responses to these parameters were collected by researcher and shown in the table 7.

Table 7: Types of infrastructure available in India

	Parameter	SA	A	N	DA	SDA	Total
1.	Transportation and port (A ₁)	20 (27.78)	33 (45.83)	6 (8.33)	7 (9.72)	6 (8.34)	72 (100)
2.	Warehousing (A ₂)	22 (30.56)	34 (47.22)	7 (9.72)	9 (12.50)	-	72 (100)
3.	Telecommunication (A ₃)	34 (47.22)	38 (52.78)	-	-	-	72 (100)

4.	Power (A ₄)	17 (23.61)	23 (31.94)	4 (5.56)	12 (16.67)	16 (22.22)	72 (100)
5.	Water (A ₅)	12 (16.67)	16 (22.22)	10 (13.89)	16 (22.22)	18 (25)	72 (100)
6.	Banking services (A ₆)	22 (30.56)	30 (41.67)	8 (11.11)	7 (9.72)	5 (6.94)	72 (100)
7.	Insurance services (A ₇)	31 (43.06)	35 (48.61)	6 (8.33)	-	-	72 (100)

Note: Figures in parenthesis indicate percentages.

Table 7 shows that the majority of the respondents showed their acceptance regarding all the parameters indicating the infrastructure available in India. 27.78 percent respondents strongly agreed with parameter A₁, whereas 45.83 percent supported them. Only 30.56 percent of the respondents strongly agreed with parameter A₂, whereas 47.22 percent supported them. Highest 47.22 percent of the respondents strongly agreed with the parameter A₃, whereas 52.78 percent supported them. 23.61 percent of the respondents strongly agreed with the parameter A₄, whereas only 22.22 percent strongly disagreed with this parameter. Respondents showed their acceptance regarding the A₅, in which 16.67 percent respondents strongly agreed and 22.22 percent supported them. Only 30.56 percent respondents strongly agreed with the parameter A₆, whereas 6.94 percent strongly disagreed with them. Regarding parameter A₇, 43.6 percent respondents strongly agreed and 48.6 percent supported them.

Table 8: Rankwise Analysis

Variable name	Reasons	Mean score	Rank
A ₁	Transportation and port	3.75	5
A ₂	Warehousing	3.96	3
A ₃	Telecommunication	4.47	1
A ₄	Power	3.18	6
A ₅	Water	2.83	7
A ₆	Banking services	3.79	4
A ₇	Insurance services	4.35	2

Result: From the ranking of the mean score in the table 8 seven parameters have been identified for infrastructure availability in India. Among the various parameter, telecommunication and insurance services are identified most important factors. Others important parameters identified according to survey are: banking services, transportation and port, power, water.

Suggestions given by respondents for attracting more FDI

Question 4 deals with the various suggestions for attracting more FDI. To study the possible suggestions, various parameters ($S_1, S_2, S_3, S_4, S_5, S_6$) were developed. The responses to these parameters were collected by the researcher through survey and shown in the table 9.

Table 9: Suggestions for attract more FDI

	Parameter	SA	A	N	DA	SDA	Total
1.	Further liberalization of its FDI policy to increase the share of FDI inflows in the global context (S_1)	23 (31.94)	32 (44.44)	11 (15.28)	6 (8.34)	-	72 (100)
2.	Good corporate governance (S_2)	51 (70.83)	16 (22.23)	5 (6.94)	-	-	72 (100)
3.	The government should introduce reforms in public administration (S_3)	30 (41.67)	36 (50)	6 (8.33)	-	-	72 (100)
4.	Reduce the rate of inflation (S_4)	28 (38.89)	30 (41.67)	6 (8.33)	8 (11.11)	-	72 (100)
5.	Stemming the tide of corruption in public life (S_5)	62 (86.11)	10 (13.89)	-	-	-	72 (100)
6.	To make the product globally competitive (S_5)	32 (44.44)	40 (55.56)	-	-	-	72 (100)

Note: Figures in parenthesis indicate percentages.

Table 9 indicates that the majority of the respondents showed their acceptance regarding all the parameters. 31.94 percent of the respondents strongly agreed with the parameter S_1 and 44.44 percent supported them. Regarding parameter S_2 , 70.83 percent of the respondents strongly agreed and 22.23 percent supported them. Only 41.67 percent respondents strongly agreed with the parameter S_3 and 50 percent supported them. 38.89 percent respondents strongly agreed with the parameter S_4 and 41.67 percent respondents supported them; whereas 11.11 percent disagreed with this parameter. Highest 86.11 percent of the respondents strongly agreed with the parameter S_5 and remaining 13.84 percent supported them. 44.44 percent respondents were strongly agreed with the parameter S_6 ; whereas 55.56 percent supported them.

Table 10: Rankwise Analysis

Variable name	Reasons	Mean score	Rank
S_1	Further liberalization of its FDI policy to increase the share of FDI inflows in the global context	4.00	6
S_2	Good corporate governance	4.64	2
S_3	The government should introduce reforms in public administration	4.33	4
S_4	Reduce the rate of inflation	4.08	5
S_5	Stemming the tide of corruption in public life	4.86	1
S_6	To make the product globally competitive	4.44	3

Result: From the ranking of the mean score in the table 10, five suggestions have been identified for attracting more FDI. Stemming the tide of corruption in public life and good corporate governance are identified most important factors for attracting more FDI. Next two important suggestions which ranked at number 3 and 4 are: to make the product globally competitive and the government should introduce reforms in public administration to cut short bureaucratic delays and to improve efficiency. Remaining two suggestions which ranked at number 5 and 6 are: reduce the rate of inflation and further liberalization of its FDI policy to increase the share of FDI inflows in the global context. Further liberalization of its FDI policy to increase the share of FDI inflows in the global context is found least important suggestion for attracting FDI, whereas stemming the tide of corruption in public life is found most important suggestion for attracting more FDI.

Conclusion and Suggestion

It is also found in the study that control / ownership decision of management is most challenges identified for attracting FDI, whereas each of physical infrastructure is least challenges identified for attracting FDI. Among the various reasons, skilled labour and India's image are identified for attracting FDI. Next important reason which ranked at number 3 is labour law. It is found in this table that telecommunication and insurance services are identified most important and warehousing is identified least important infrastructure available in India.

As per the suggestion offered by the respondents with regard to attracting more FDI. Most of the suggestions centered around aspects viz. stemming the tide of corruption in public life, good corporate governance, product globally competitive and the government should introduce reforms in public administration to cut short bureaucratic delays and to improve efficiency, reduce the inflation rate and further liberalization of its FDI policy to increase the share of FDI inflows in the global context.

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TO STUDY HOW IMPROVISATION CAN BE MADE IN FACILITIES AND WORKING CONDITIONS FOR CONTRACT LABOUR

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Abstract:

The immediate post-Independence period was marked by the enactment of comprehensive labour legislation and pervasive state intervention in labour matters. Though the Industrial Truce Resolution of 1947 pleaded for "the fullest co-operation between labour and management and stable and friendly relations between them" and for settlement of all disputes "through mutual discussion", state control over labour and management became in practice the determining factor in industrial relations. The failure of the policy of state intervention and control, however, gradually compelled the Government to revise its labour policy. Productivity *can* be raised by *better* trained workers, improved work organisation policies, training policies and *working conditions* in general. Issue of *contract labour* has been very important, The construction industry responded to demands on environmental sustainability by *improvising the working condition*. *Present paper is an attempt to find the means of how better improvisation can be made in facilities and working conditions for contract labour*

Key Words: labour legislation, *working conditions*, *contract labour* employment condition

Introduction

The Government of India has been deeply concerned about the exploitation of workers under the contract labour system. With a view to removing the difficulties of contract labour and bearing in mind the recommendations of various commissions and committees and the decisions of the Supreme Court, particularly in the case of Standard Vacuum Refining Company in 1960, the

Contract Labour (Regulation and Abolition) Act was enacted in 1970. This Act seeks to regulate the employment of contract labour in certain establishments and to provide for its abolition under certain circumstances.

Contract Labour, by and large, is neither borne on pay roll or muster roll nor is paid wages directly. The establishments, which farm out work to contractors, do not own any direct responsibility in regard to their laborers.

Problem Formulation

In the present era of industrialization followed by competition, the practices of employing contractual labour is prevalent in most of the industries as mean of producing output at minimum cost.

The main objective of any industries is to obtain maximum profit with minimum cost and to attain that objective industries do all what it can and over see all the basic needs of contractual worker, however terms and condition of working environment are enshrined in Contract Labour (Regulation and Abolition) act.

The base of our research is to find the solution of problem related to contractual worker in connection with poor economic and miserable condition in spite of law formulated by government in Contract Labour (Regulation and Abolition) act

RESEARCH OBJECTIVE

1. To study the current working conditions and facilities provided to contract labour.
2. To study how better improvisation can be made in facilities and working condition for contract labour

PRIMARY DATA was collected by personally interviewing with contract worker. A survey was conducted keeping in view the objective of the study. The questionnaire consisted of both

open ended and close-ended questions. It took almost a month to get the questionnaire filled up. Many problems were faced with contractual labour for extracting the information.

The sample size is 100 respondents.

SAMPLING UNIT

Industries of Haridwar and Dehradun

ANALYSIS AND FINDINGS

TABLE :- 1

WORKING CONDITION OF CONTRACT LABOUR

Variable	Percentage		
	8 hrs.	10 hrs.	12 hrs.
Hours Work	38%	39%	23%
	½ hr.	1 hr.	
Hours Rest/Lunch	100%	0	
	Yes	No	
Weekly off	100%	0	
Wages timely	85%	15%	
Exit Pass	74%	26%	

From this table it is clear that the organization is not following proper working hours. The hour of rest/lunch for all workers who is having only half an hour break for refreshment. Best respondents towards the satisfaction of the existing working condition are found in the two cases viz. weekly off & wages timely.

TABLE :- 2

WORKING CONDITION OF CONTRACT LABOUR

Variable	Mean
Facilities in night	1.65

Clean work place	2.95
Ventilation and temperature at work place	2.56
Dust / Fume control conditions	2.27
Lighting at work place	3.21
Time given for the job to be done	2.73
Moving heavy load	2.72
Automated machine	2.74
Behaviour of supervisor	3.2
Cultural environment.	3.2
Regularization procedure of services	2.49
Motivational schemes	2.68

This table shows the working condition of contract labour. Working condition of respondents are shown as mean value as well as in percentage where mean value is calculated based on the points allotted by respondents in 5 points scaling wherein point 5 is allotted to “ Excellent” and point 1 is allotted to “ Poor” and percentage is calculated based on number of respondents being working condition about particular variable. Best response for working condition are found in three cases viz. ‘Cultural environment’, ‘Behaviour of Supervisor’ and ‘Lighting at work place’. Poor response is found in the case of ‘Facilities in night’.

TABLE :- 2

PRESENT FACILITY OF CONTRACT LABOUR

Facility	Mean
-----------------	-------------

Advance	1.27
Uniform	1.47
Washing	1.07
Food	1.87
Tea	1.79
Water	2.91
Rest Room	1.11
First aid	2.12
Conveyance	1
Crèche Room	1.08
Urinal/latrine	2.35

This table shows the facility of contract labour. facility of contract labour in organization of respondents are shown as mean value as well as in percentage where mean value is calculated based on the points allotted by respondents in 5 points scaling wherein point 5 is allotted to “ Excellent” and point 1 is allotted to “ Poor” and percentage is calculated based on number of respondents being working condition about particular variable.

Best response towards the satisfaction of the existing facilities are found in three cases viz. ‘First aid’, ‘Water’ and ‘Urinal/latrine’. Poor result is found in case of ‘Conveyance facility’.

TABLE :- 3

IMPROVEMENT IN WORKING CONDITION

Variable	Respondent (%)
Hours Rest/Lunch (1hr)	9%
Dust / Fume control	5%

From the above table it is clear that only 9% respondent wanted improvement in ‘Rest/Lunch hour’ and only 5% need an improvement in ‘Dust/Fume control’.

TABLE :- 4

IMPROVEMENT IN FACILITY

Variable	Respondent (%)
Advance facility	38%
Washing facility	58%
Food quality	48%
Tea quality	21%
First aid facility	4%
Conveyance facility	15%
Urinal/latrine clean	10%

From the above table it can be said that contract labour wanted improvement in ‘ Washing Facility’ with 58% followed by ‘Food Quality’ with 48%.

Conclusion

In fact today also Best response for working condition are found in three cases viz. 'Cultural environment', 'Behaviour of Supervisor' and 'Lighting at work place'. Poor response is found in the case of 'Facilities in night'. Best response towards the satisfaction of the existing facilities are found in three cases viz. 'First aid', Water' and 'Urinal/latrine'. Poor result is found in case of 'Conveyance' From the above table it is clear that only 9% respondent wanted improvement in 'Rest/Lunch hour' and only 5% need an improvement in 'Dust/Fume control. From the above table it can be said that contract labour wanted improvement in ' Washing Facility' with 58% followed by 'Food Quality' with 48%. It is also observed that the degree of respondent response towards improvement of working condition is different as per their perception about need. Some respondent feel that period of lunch time should be extended whereas some responded feel that hazard condition of working environment should be improved. It also observe that respondent response towards improvement of facilities is also different some respondent feel that there should be facility of washing allowance whereas some respondent feel that the quality of tea provided to the respondent should be improved whereas some respondent feel the quality of food also be improved, some also respondent also feel that there should facility of first aid in the premises of organization to cope up in the accident situation, some respondent also feels that they should be facility of conveyance.

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Understanding Dark Side Practices of Customer Relationship Management (CRM)

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Abstract: The way in which marketing is being practised is changing , and this, in turn, is due to dramatic changes in marketing context such as physical distance, time, economy, deregulation, globalization, customer expectations, and new cutting edge information technology(IT). Now, there is an increasing emphasis on managing marketing relationship, networks, and interactions, both internally with employees and externally with suppliers and customers and other important markets. Managing the customer relation is a key activity for an organization. In fact, Customer Relationship Management (CRM) is a strategy that can help organization to build long lasting relationship with their customers and increase profits through the correct management system. CRM aims at lower cost in retaining a customer rather than winning new customers. IT has pushed it further in recent years. This paper broadly aims at to consider the neglected areas of CRM. Alternatively stated, it attempts to identify

the key types of dark side practices of Service Providers their impact on customers. The present study is based on the primary data collected from different organizations like banking, tourism, IT, health and real estate.

Keywords: Customer, Customer Relationship Management (CRM), Service Providers.

Understanding Dark Side Practices of Customer Relationship Management (CRM)

Introduction

Today, in the emerging business world, management recognizes that customers are the core of a business and that a company's success depends on effectively managing relationships with them. All the objectives are focused on one ultimate goal that is to make customers happy because they are the ones who keep the business running. Companies earlier did not consider this as an objective and often ignored their customers who did not come back. But today's companies track their customers' interaction with the firm and allow the firms employees to quickly retrieve all information about the customers. This concept is called a Customer Relationship Management (CRM). If this system is used properly, could enhance a company's ability to achieve the ultimate goal of retaining customer and so gain a strategic advantage over its competitors (Nguyen, Thuy Uyen H(2007). CRM is influenced by richness of Relationship Management; it is almost exclusive focused on managing relationship with the end customer. It is a process designed to collect data related to customer, and to apply those qualities in the specific marketing activities (Swift 2001). CRM is not a new concept; it has continuously existed in the past as well. To clarify the concept of CRM, We need to understand the relationship marketing and customer relationship marketing closely. Customer relationship is a

comprehensive approach that promises to maximise relationships with all customers, including internet or “e-customer”, distribution channel members, and suppliers.

Now, Marketing is not a function; it is a way of doing business. It is also about how to integrate the customer for interaction that will help in creating substance in relationship. In this hyper competitive world, organisations have to please their customer to discover. Thus, CRM is related with developing a comprehensive picture of customer needs, expectations and behaviors. Electronic customer relationship management (e-CRM) emerges from the Internet and Web technology to facilitate the CRM implementation especially, e-CRM enables services sector to provide appropriate services and products to satisfy the customer royalty and enhance customer profitability. It enhances customer value by motivating valuable customer to remain loyal. This paper aims to consider the dark side practices of CRM and its impact on customer.

Review of Literature

Jackson(1985) suggests CRM to mean “marketing oriented towards strong, lasting relationship with individual accounts”. Harker(1999) proposes the following definition; “An organization engaged in proactively creating, developing and maintaining committed, interactive and profitable exchange with selected customer over time’. Payne(2000) asserts that CRM is concerned with the creation, development and enhancement of individualized customer relationships with carefully targeted customers and customer groups resulting in maximizing their total customer life-time value. Rowely(2002) defines the customer knowledge as knowledge about customers, which includes knowledge about potential customers, customer segments and individual customers. Gummesson(2002) defines it as “marketing based on relationship, networks and interaction, recognizing the marketing is embedded in the total management of the networks of

selling organizations, the market and society. It is directed to long term win-win relationships with individual customers, and value is jointly created between the parties involved”. Kellen(2002) successfully pinpoints the heart of the concept by stating that it is “a business strategy aimed at gaining long-term competitive advantage by optimally delivering customer value and extracting business value simultaneously”. Bull(2003) in his overview of the concept has shown that while CRM is a business process that is based on the effective management of customer relationship, another very important view of CRM is its technological orientations. Luck and Lancaster(2003) suggest that the term CRM is part of marketing efforts, customer services, particular software and technology or even process and strategy. Draft(2003) focuses that CRM building long-term and sustainable customer relationship that add value for both the customer and the company. Lika(2006) describes a 12- steps process for rolling out CRM in easy-to-handle, but effective, manageable steps. Each “baby step” brings moral value.

Objective of the Study

As, the title suggests, the prime aim of the present study is understanding the dark side practices of CRM in selected service sector. However in order to pursue this broad objective, some affiliated objectives have been identified which are given as follows:

- To know the dark side practices of CRM.
- To identify the key types of dark side practices of Service Providers.
- To know the impact of dark side practices on customer relationship.

Research Methodology

The present study is based on primary data, which has been collected through a Multiple-choice and well structured questionnaire. Questionnaire has been filled through personal contact with respondents. The questionnaire also contains some statements to which respondents have to give their level of agreement ranging from strongly agree to strongly disagree. The number of respondents is 100, all from Rohtak city in Haryana. Since it is not possible to examine the entire universe, the researcher decided to design a representative sample. Stratified random sampling technique has been adopted to determine the universe. The scope of this study covers mainly six industries of service sector, dealing in consumer services namely- communication, tourism, banking, health, real estate and IT.

Data Compilation Technique

To know the perception of respondents on the dark side's practices of Service providers, they were asked to evaluate on 1 to 6 point scale. All the factors were aggregated onto one factor by taking the weighted average of individual factors while percentage of behavior explained by individual factors is taken as weight. In this way, we have extracted the weight of all factors into one factor. Factor analysis is far the most often used multivariate technique of research studies, specially pertaining to solve problem relating to behavioral science. Factor analysis is most desirable technique to analyze inter-related variables of large number. It is a technique applicable when there is a systematic inter-dependence of observed variables and the researcher is more interested in finding which is more fundamental.

Analysis

The responses are analysed and the result are presented in the subsequent discussion.

Results of table1 clearly depict that service providers of selected service sector misuse the CRM System of their organization and this leads to negative impact on customers. The detailed information to serve customer better is not used by the service providers honestly. In this variable maximum average score is observed by communication sector followed by real estate and is minimum in health sector. The clear inference is that communication sector is more misusing the detail information of customers. It is also evident that favoritism is done on the basis of information. High priority customers are offered additional and superior services than other customers, Tourism and health sectors score maximum followed by communication sector. It is minimum in case of IT. To disturb the customer by trying to sale the product and services to customer which they don't need on the basis of information stored in CRM, communication sector recorded the maximum average score followed by banking sector and the minimum score is in health sector. It is found that service providers make it difficult and costly for customer to change other service providers for the same services and average maximum value is with banking sector followed by tourism and health. It is minimum in IT. The next variable which is related with the entertainment of complaints regarding misuse of information is highest in tourism followed by IT, health and banking. It is observed that a prompt corrective action is taken if the customer complaints about the misuse of information in health sector followed by tourism and IT. Real estate gets the lowest score. The customers are discouraged to share their problems when it arises the average maximum value is in health followed by tourism. It is further seen that the service providers are too busy to respond to customer request in banking followed by tourism. It is minimum in case of communication sector.

Table 1: Dark Sides Behavior of Service Providers

Variable	Commu- nication	IT	Tourism	Health	Banking	Real Estate
	Mean	Mean	Mean	Mean	Mean	Mean
Mis- use of information	7.6	5	4	3	6	6.5
Favoritism is done	7.3	3	7.4	7.4	4.8	4.5
Disturb the customer	7.2	5.4	4.8	3.7	6.9	4.3
Difficult to change	4.3	3.4	6.4	6.4	7.4	6.3
Entertainment of complaints	4.5	5.4	7.4	5.4	5.4	3.4
Corrective Action	4.5	5.6	6.6	7.3	5	4
Discourage the customer	4.5	4	5.7	6.4	5.6	6
Too busy to respond	4	6	7	5	7.4	6.3

Table 2 brings out the impact of dark side practices on customers. On the whole, results of table 2 indicate about nine-tenth revealed that They

experienced dark side practices in one way or the others. Fourteen percent respondents are dissatisfied with the dark side Practices. Further twelve per cent lost their loyalty and trust in service providers. Other impacts like losing customers unable to attract the customers, losing goodwill, losing business are the outcomes or dark practices undertaken by service providers in order to make money. Notably, nearly one –tenth respondents are not aware about the dark side practices of service providers.

Table 2: Impact of Dark Side Practices on Customers

Variable	Frequency	Percentage
Customer dissatisfaction	14	14
Losing loyalty and trust	12	12
losing customer	33	33
unable to attract the customer	10	10
losing goodwill	10	10
losing business	11	11
No response	10	10
Total	100	100

Findings

On the basis of the statements embodied in the questionnaire the following are the findings:

The study reveals that service providers are addressing dark side practices with their customers from their CRM system, even though, they know that customer are the key to success for their business and cost of acquiring customers and the benefits cost of retention is more. For a long survival of a business, the organization must concentrate on abandoning the practices which are harming it.

The study highlights the outcome of dark side practices of service providers on the customers: that it results in losing loyalty and trust, losing

customer, losing goodwill, losing business and unable to attract the customers. If CRM is used for better practices, it brings profits, customer, as well as good will for organization. The study reveals that the service providers are creating problems for themselves and for their business because quality and transparency in relationship with customers is lacking. And in the long run this will destroy business than anything else can do.

Conclusion

The study confirms that CRM is very complex and holistic approach that requires appropriate practices. The study also confirms, that dark side practices exist and word “relationship”, is poorly practiced. CRM paradoxically, often focuses here on the transactions rather than on building and maintaining relationship. The wide spread prevalence of dark side practices of CRM calls upon the service providers to be punctual, socially responsible and ethical. The dark side practices causes dissatisfaction among customers, losing customer, loyalty and trust of customer, reputation of business and business itself. This study has identified the scope for further research on the issues like social and economic impact of dark side practices. More research that seeks to understand how the service providers can avoid damaging dark side practices during interaction with customer dysfunctional economic, social and ethical consequences of dark side practices.

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AN EMPIRICAL EVALUATION OF THE CUSTOMER SATISFACTION FOR THE BOTTLED WATER – A CASE STUDY OF JODHPUR CITY

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Abstract

The customer satisfaction is important for the promotion of any product in the market. The bottled water market is growing because of the travel and the health related issues. The quality of water and the price plays an important role in make the bottles acceptable in the market. The water is necessity with the growing needs of life and business. The brands providing bottled water focus on the distribution and availability with building the customer satisfaction through the promotion strategies. The bottled water industry has engaged in an expensive public relations campaign to persuade the public about the purity of bottled water and focuses on the cost, safety, quality. The objective of the paper is doing the analysis for the customer satisfaction of the respondents using the bottled water in Jodhpur. The aim is to design the strategy for enhancing the customer satisfaction so as to increase the acceptance of the product in the market with the increased loyalty and commitment.

Key words- consumer, satisfaction, quality, price, business

Introduction

Water is the most important necessity for life. The drinking-water needs for individuals vary depending on the climate, physical activity and the body culture, but for average consumers it is estimated to be about two to four litres per day. Eighty percent of the human metabolism consists of water. This is the reason why

90% of human diseases are water borne. The growing number of cases of water borne diseases, increasing water pollution, increasing urbanization, increasing scarcity of pure and safe water etc. has made the bottled water business just like other consumer items. Scarcity of potable and wholesome water at railway stations, tourist's spots, and role of tourism corp. etc. has also added to the growth. Indians currently spending about \$330m a year on bottled water. The packaged water market constitutes 15 per cent of the overall packaged beverage industry, which has annual sales of atleast \$2.6bn, Almost all the major international and national brands water bottles are available in Indian market right from the malls to railway stations, bus stations, grocery stores and even at pinwale's shop. Before few years bottled water was considered as the rich people's choice, but now it is penetrated even in rural areas. The growth and status of Indian Bottled Industry in comparison with Western or Asian market, India is far behind in terms of quantum, infrastructure, professionalism and standards implementation.

People choose bottled water because it is perceived to be safer and of higher quality than tap water, and many are now using it because they view it as a healthful alternative beverage to soft drinks or alcohol. The public is concerned about tap water safety and quality, and, with much encouragement from the bottled water industry's aggressive marketing, views bottled water as a purer, safer option. As a key industry consultant put it, "water bottlers are selling a *market perception* that water is 'pure and good for you' . . . Just to be sure this public perception is carefully nurtured, the bottled water industry has engaged in an expensive public relations campaign to persuade the public about the purity of bottled water and to disabuse the public of any "misconceptions about the cost, safety, quality and regulations governing bottled water Like any other industrial activity, bottled water is not completely innocuous to the environment. On the one hand, quality standards and controls as well as spring protection could help better protecting water quality at a larger scale. The choice of packaging materials increasingly considers environmental parameters. On the other hand, manufacturing, recycling or incinerating bottles of water implies energy needs and some outlets in air and water of polluting particles. Transporting bottled water throughout the world also implies energy needs as well as fuel combustion

Review of literature:

In psychology, preferences could be conceived of as an individual's attitude towards a set of objects, typically reflected in an explicit decision-making process (Lichtenstein & Slavic, 2006). Alternatively, one could interpret the term "preference" to mean evaluative judgment in the sense of liking or disliking an object (e.g., Scherer, 2005) which is the most typical definition employed in psychology. Consumer preference for a product can make or break a company. If consumers generally like a product, it can stay around for years and sell millions of copies.

Engel, kollet and Blackwell defines consumer behaviour as "acts of individuals directly involved in obtaining and using economic goods and services, including the decision processes that precede and determine these acts. In effect, it involves the study not only of what people consume but when, how often and under what conditions goods and services are consumed.

Customer satisfaction, a term frequently used in marketing, is a measure of how products and services supplied by a company meet or surpass customer expectation. Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals."It is seen as a key performance

indicator within business and is often part of a Balanced Scorecard. In a competitive marketplace where businesses compete for customers, customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy. Within organizations, customer satisfaction ratings can have powerful effects. They focus employees on the importance of fulfilling customers' expectations. Furthermore, when these ratings dip, they warn of problems that can affect sales and profitability. When a brand has loyal customers, it gains positive word-of-mouth marketing, which is both free and highly effective.

Customer satisfaction is measured at the individual level, but it is almost always reported at an aggregate level. It can be, and often is, measured along various dimensions. Customer satisfaction is an ambiguous and abstract concept and the actual manifestation of the state of satisfaction will vary from person to person and product/service to product/service. The state of satisfaction depends on a number of both psychological and physical variables which correlate with satisfaction behaviours such as return and recommend rate. The level of satisfaction can also vary depending on other options the customer may have and other products against which the customer can compare the organization's products.

Work done by **Parasuraman, Zeithaml and Berry (Leonard L)** between 1985 and 1988 provides the basis for the measurement of customer satisfaction with a service by using the gap between the customer's expectation of performance and their perceived experience of performance. This provides the measurer with a satisfaction "gap" which is objective and quantitative in nature.

The usual measures of customer satisfaction involve a survey with a set of statements using a Likert Technique or scale. The customer is asked to evaluate each statement and in term of their perception and expectation of performance of the organization being measured. Their satisfaction is generally measured on a five-point scale.

Very dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Very satisfied
1	2	3	4	5

Customer satisfaction data can also be collected on a 10-point scale.

Consumer Satisfaction as defined by Joseph A. Cote Washington State University

When examined as a whole, three general components can be identified: 1) consumer satisfaction is a response (emotional or cognitive); 2) the response pertains to a particular focus (expectations, product, consumption experience, etc.); and 3) the response occurs at a particular time (after consumption, after choice, based on accumulated experience, etc). Consumer responses followed a general pattern similar to the literature. Satisfaction was comprised of three basic components, a response pertaining to a particular focus determined at a particular time.

Response: Type and Intensity - Consumer satisfaction has been typically conceptualized as either an emotional or cognitive response. More recent satisfaction definitions concede an emotional response. The emotional basis for satisfaction is confirmed by the consumer responses... Response intensity refers to the

strength of the satisfaction response, ranging from strong to weak. Terms such as, "like love," "excited," "euphoria," "thrilled," "very satisfied," "pleasantly surprised," "relieved," "helpless," "frustrated," "cheated," "indifferent," "relieved," "apathy," and "neutral" reveal the range of intensity. In sum, the literature and consumers both view satisfaction as a summary affective response of varying intensity.

Focus of the Response - The focus identifies the object of a consumer's satisfaction and usually entails comparing performance to some standard. This standard can vary from very specific to more general standards. There are often multiple foci to which these various standards are directed including the product, consumption, purchase decision, salesperson, or store/acquisition. The determination of an appropriate focus for satisfaction varies from context to context. However, without a clear focus, any definition of satisfaction would have little meaning since interpretation of the construct would vary from person to person.

Timing of the Response - It is generally accepted that consumer satisfaction is a post purchase phenomenon, yet a number of subtle differences exist in this perspective. The purchase decision may be evaluated after choice, but prior to the actual purchase of the product. Consumer satisfaction may occur prior to choice or even in the absence of purchase or choice.

Objective

- To find out the preference level of respondents regarding bottled water.
- To find out the reasons for preferences of bottled water as against tap water.
- To discover the factors that drive people towards consuming bottled water.

Hypothesis

H₀₁: There is no significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by age preferring bottled water in Jodhpur.

H₀₂: There is no significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by gender preferring bottled water in Jodhpur.

H₀₃: There is no significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by education preferring bottled water in Jodhpur.

Alternate hypothesis

H_{A1}: There is significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by age preferring bottled water in Jodhpur.

H_{A2}: There is significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by gender preferring bottled water in Jodhpur.

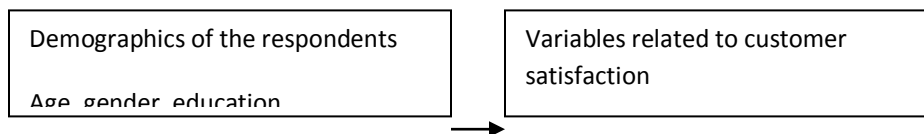
H_{A3}: There is significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by education preferring bottled water in Jodhpur.

Research methodology

Primary source of collecting data:

The Primary Data that I collected were the first hand information which I received through, personal interviews, data mailing and personally distributing questionnaire to the respondents. This data gave the most vital information for making my analysis of the prevailing purchasing behaviour of the consumers. Primary data was collected by using survey method; survey conducted was door to door with the help of open and closed end questionnaires.

Research design:



Sample design:

The sample design which has been use in this project report is simple random sampling.

Sampling unit:

A decision has to be taken concerning a sample unit before selecting the number of samples. It may be geographical as well as individual. Here Jodhpur region has been taken as a geographical unit and retailers as an individual unit.

Size of sample:

Appropriate

- **Secondary Data:** Secondary Information will be collected from Magazines, News Papers and Internet & other sources.
- **Statistical analyses:** The collected data were subjected to various statistical analyses for the Presentation In terms of percentage, tables and bar charts.

Tool's for measurement: Closed end questionnaires.

Inferential statistics

Part -1:

One Way ANOVA of impulse buying behaviour by education

Test of Homogeneity of Variances

total preference

Levene Statistic	df1	df2	Sig.
1.016	2	97	.366

ANOVA

total preference

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	146.132	2	73.066	3.555	.032
Within Groups	1993.578	97	20.552		
Total	2139.710	99			

Robust Tests of Equality of Means

total preference

	Statistic ^a	df1	df2	Sig.
Welch	3.223	2	28.396	.055
Brown-Forsythe	3.640	2	48.379	.034

Analysis: Groups are of unequal sizes (from descriptive), we therefore directly look at Welch and Brown-Forsythe test, and it shows significant value hence satisfaction differs in education group.

Post Hoc Tests

Multiple Comparisons

total_preference

Tukey HSD

(I) education	(J) education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Undergraduate	graduate	2.562*	.966	.025	.26	4.86
	postgraduate	1.816	1.543	.470	-1.86	5.49
Graduate	undergraduate	-2.562*	.966	.025	-4.86	-.26
	postgraduate	-.746	1.513	.875	-4.35	2.85
Postgraduate	undergraduate	-1.816	1.543	.470	-5.49	1.86

graduate	.746	1.513	.875	-2.85	4.35
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*. The mean difference is significant at the 0.05 level.

Analysis: Groups are of nearly equal sizes (from descriptive), Homogeneity of variance shows 'non-significant' value, with an oval table showing significant value, hence Tukey Post Hoc test is requested. Graduate groups have significant less preference level than undergraduate and postgraduate groups.

Part -2:

One Way Anova of impulse buying behaviour by Age

Test of Homogeneity of Variances

total preference

Levene Statistic	df1	df2	Sig.
1.016	2	97	.366

ANOVA

total_preference

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	146.132	2	73.066	3.555	.032
Within Groups	1993.578	97	20.552		
Total	2139.710	99			

Robust Tests of Equality of Means

total_preference

	Statistic ^a	df1	df2	Sig.
Welch	3.223	2	28.396	.055
Brown-Forsythe	3.640	2	48.379	.034

a. Asymptotically F distributed.

Analysis: Groups are of unequal sizes (from descriptive), we therefore directly look at Welch and Brown-Forsythe test, and it shows significant value hence satisfaction differs in age group.

Post Hoc Tests

Multiple Comparisons

total_preference

Tukey HSD

(I) age	(J) age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
below20	20-30	2.562*	.966	.025	.26	4.86
	30-40	1.816	1.543	.470	-1.86	5.49
20-30	below20	-2.562*	.966	.025	-4.86	-.26
	30-40	-.746	1.513	.875	-4.35	2.85
30-40	below20	-1.816	1.543	.470	-5.49	1.86
	20-30	.746	1.513	.875	-2.85	4.35

*. The mean difference is significant at the 0.05 level.

Analysis: Groups are of nearly equal sizes (from descriptive), Homogeneity of variance shows 'non-significant' value, with anova table showing significant value, hence Tukey Post Hoc test is requested. The people with age group between 20-30 have significant less preference level than undergraduate and postgraduate groups.

Part -3

Anova One-Sample t Test

One-Sample Test

	Test Value = 3.5					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
thirst_quencher	1.583	99	.117	.170	-.04	.38
social_occasion	1.445	99	.152	.150	-.06	.36
Taste	4.108	99	.000	.360	.19	.53
satisfaction	.584	99	.561	.060	-.14	.26
sense_of_well_being	3.538	99	.001	.330	.14	.52
Energy	1.942	99	.055	.200	.00	.40
relaxation	-3.618	99	.000	-.360	-.56	-.16
Attitude	-6.367	99	.000	-.640	-.84	-.44
total_preference	53.280	99	.000	24.770	23.85	25.69

Analysis: Factors having negative significant value specially attitude with the highest negative value is least considered with the preference of bottled water.

Anova Linearity & Non-Linearity Tests and One-Sample t Test

<i>Linearity and Non Linearity Tests</i>				
S. No.	Total Satisfaction	Between groups	F	Sig.
1.	Thirst_quencher	Combined	20.226	.000
		Linearity	69.194	.000
		Deviation from Linearity	3.903	.011
2.	Social occasion	Combined	13.425	.000
		Linearity	38.023	.000
		Deviation from Linearity	1.126	.329
3.	Taste	Combined	16.664	.000
		Linearity	63.989	.000
		Deviation from Linearity	.889	.450
4.	Satisfaction	Combined	14.794	.000
		Linearity	44.733	.000
		Deviation from Linearity	4.814	.004
5.	Sense of well being	Combined	40.245	.000
		Linearity	119.395	.000
		Deviation from Linearity	.670	.514
6.	Energy	Combined	12.910	.000
		Linearity	36.616	.000
		Deviation from Linearity	1.057	.351
7.	Relaxation	Combined	26.164	.000
		Linearity	91.005	.000
		Deviation from Linearity	4.551	.005
8.	Attitude	Combined	8.652	.000
		Linearity	22.736	.000
		Deviation from Linearity	3.957	.010

Table 13 Measures of Association					
S. No.	Total Satisfaction	R	R Squared	Eta	Eta Squared
1.	Thirst quencher	.627	.393	.678	.460
2.	Social occasion	.528	.279	.544	.296
3.	Taste	.629	.396	.642	.412
4.	Satisfaction	.539	.290	.620	.384
5.	Sense_of_well_being	.742	.551	.746	.557
6.	Energy	.521	.272	.536	.287
7.	Relaxation	.675	.456	.724	.524
8.	Attitude	.419	.175	.517	.267

Results of the hypothesis testing

Hypothesis	
H₀₁: There is no significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by age preferring bottled water in Jodhpur.	Reject
H₀₂: There is no significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by gender preferring bottled water in Jodhpur.	Reject
H₀₃: There is no significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by education preferring bottled water in Jodhpur.	Reject

Alternate hypothesis
H_{A1}: There is significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by age preferring bottled water in Jodhpur. Accept
H_{A2}: There is significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by gender preferring bottled water in Jodhpur. Accept
H_{A3}: There is significant difference with the reasons associated with the use of bottled water and customer preference amongst people classified by education preferring bottled water in Jodhpur. Accept

The strategic input to enhance the customer satisfaction

The customers have to be treated with respect to enhance the faith in the quality of bottled water. The marketing efforts have to concentrate to focus on the cost, price, value and safety to give the satisfaction to the customers. The distribution channel has to be strong so the promotion of the product can put an impact on the customers. The content of the water should not be quality based but it has to relate to the taste which can give freshness and purity to the customers. Water is the basis of life so it has to relate to the attitude and energy giving abilities. The advertisements have to focus on the consumer to raise the sense of leading a healthy and hygienic life.

The marketing efforts have to boost the profile of the product to enhance the value related to lifestyle, energy and taste to give the satisfaction.

Conclusion

On the basis of the data collected and the tests conducted I have arrived at the following conclusions:

With the help of correlation I was able to identify the attributes that consumers associate with the various bottled water and which in turn drive their purchase decision for the same. Drinking bottled water has become a trivial habit in many people's everyday lives. Bad tap water taste or quality, fitness objectives or safety purposes, numerous reasons lead consumers to buy bottled water. The trend toward consuming more and more bottled water will keep increasing in the coming years. Bottled water may have reduced amounts of copper, lead, and other metal contaminants since it does not run through the plumbing pipes where tap water is exposed to metal corrosion, however, this varies by the household and plumbing system. Considering that using tap water for drinking or cooking represents only a minor part of households' tap water consumption, it would not be necessary anymore to provide them with fully drinking quality tap water. Tap water could be of lower quality, and replaced, for drinking purposes, by carboy-delivered purified water. Nevertheless, bottled water should not be considered a sustainable

Alternative to tap water, as it is not exempt from periodical contamination. In addition, tap water is more energy-efficient as it is provided through underground pipes, compared to fuel and energy needed for filling bottles and

transporting them around the world. Tap water is and should remain a public service meant to deliver good quality drinking water. It becomes important for the company to have a good distribution network. It should be understood that if the mineral water is easily available everywhere then it can be said with confidence that it would be able to replace the soft drinks and tap water as thirst quencher. If we try and look at the reasons that why consumers buy soft drinks as thirst quenchers: we would find the answer as that either water is not available or if it is available then safety is not assured. Therefore, backed by a good distribution network

Mineral water industry can grow at a rapid rate. There is also a high association between purchase frequency and reasons for consuming bottled water such as fulfilling basic thirst and a sense of well being. The most preferred bottled water brand is Bisleri followed by Kinley and Aquafina

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Factors Affecting Customer satisfaction of pre-owned cars: An Empirical Study on Customers of Uttrakhand State

Mr. Rajesh Manchanda

Abstract

Consumers judge quality of a product or service on the basis of a variety of informational cues. Some are intrinsic to the product like color, size, flavor, aroma, etc., while others are extrinsic like price, store image, brand image, service environment, etc. It is seen that today's priority of top executives is to improve product and service quality. Consumers will not accept nor tolerate poor quality performance of the product. Marketers play several roles in helping their company to deliver high quality goods and services to target customers. Marketers have to bear the responsibility for correctly identifying the customer needs and requirements, communicate customer expectations to product designer and make sure that they stay in touch with customers after the sale to ensure that they are satisfied and remain satisfied. They have to gather customer ideas for product and service improvements and convey them to the appropriate company departments which will lead to better customer satisfaction and customer loyalty. The present study focuses on factors affecting customer satisfaction - four wheeler-pre-owned - and find out the relationship between their purchase behavior and level of satisfaction. The primary data was collected with the help of structured, non-disguised questionnaires, from a sample size of 110 customers. The respondents were selected from the database provided by three dealers and interviewed on the basis of their willingness to answer. The findings of the study show that businessmen and professionals comprise the majority of the used car customer segment. Further, the respondents indicated an overall satisfaction towards the pre-purchase, purchase and post-purchase procedure involved in the buying of pre-owned car.

Introduction

Indian economy has grown at an annual rate of more than 8% over the last five years and the industrial production has made an outstanding contribution to this growth. India's automotive market is driven by overall GDP growth, which has been about 7 to 9 per cent for the past three years. Auto industry was licensed, controlled and restricted in the early years of independent India and had a limited contribution to the economy. But post delicensing in 1991 the industry has grown at an average rate of 17%. The industry currently contributes about 5% of the GDP

and it is targeted to grow fivefold by 2016 and account for over 10% of India's GDP. Automotive mission plan (AMP) expects the industry to reach a turnover of \$150-200 billion in the next ten years from the current \$45 billion levels. Over the last five years the production of four wheelers in India has increased from 9.3 lakh units in 2002-03 to 23 lakh units in 2007-08 reporting a CAGR of 20%. As a developing economy, India today ranks very low in terms of vehicles per 1000 people, but past experience in other markets suggests that as GDP per capita grows, the automotive market would also grow. Globalization of Indian Economy has brought a change in the Indian consumerism psyche with the consumer becoming more aware of his/her money power and purchasing power becoming more evident than in the previous generations. The concept of product quality and service delivery which were earlier not very engraved in the consumer psyche are now very much demanded and delivered in the new age format of organized product retailing in the Indian consumer goods market. These changes have led to the overall increase of professionalism in the service delivery as well as consumer purchase patterns shifting from "need only" base to "extended purchase characteristics". The middle class has been a leading adaptor of this change process by virtue of changing lifestyles, strong income growth and changing demographic patterns which are placing the growth projections for this industry comfortably at 25% annually. With the craze for new models on the rise, car manufacturing companies are vying with one another in terms of upgrading the existing models with added features and introduction of new models. However all these new vehicles are always projected as rich man's prerogative which the average salaried middle-class man can only dream and add to his wish list. In this scenario, Manufacturer Certified Pre-owned (MCP) Programs are designed to give buyers the chance to purchase a used car with confidence by offering some or all of the benefits of a new car like comprehensive vehicle inspection, extended warranties, strict quality guidelines, roadside assistance etc. This is influencing customers for brand loyalty and helping Auto makers to bring in more customers into their fold.

Review of Literature

Whether a buyer is satisfied after purchase depends on the performance offered in relation to the buyer's expectations. Satisfaction is a person's feelings of pleasure or disappointment resulting from comparing a product's actual delivered performance in relation to his or her expectations at the time of purchase. Satisfaction is a result of delivered actual realization as compared to expected performance. If the actual performance falls short of expectations, the customer is dissatisfied. If the performance matches the expectations, the customers are satisfied. If the performance exceeds expectations, the customers are delighted and tell others. The ultimate objective of companies is customer delight because customers who are just about satisfied still find it easy to switch when a better offer comes along. Those who are highly satisfied are much less ready to switch. High satisfaction or delight creates an emotional bond with the brand. The result is customer loyalty.

Literature on relationship marketing suggests that marketing task is to guide a customer through various stages of the relationship development process from establishing a business relationship to creating a long-term commitment (Jackson 1985; Levitt 1983). In relationships with channel customers, salespersons are expected to play a critical role; their personal interactions and ongoing efforts to build and maintain the exchange can be a source of tremendous value and customer satisfaction (Cravens 1995; Wortruba 1991).

According to one study on Customer Satisfaction Index (CSI), 35% of customer satisfaction is affected by quality of the car in terms of the number of repair problems that cropped up and how often it was returned for re-service. Another 28% is contributed by ability of the service advisor to understand the problem and his promptness in attending to the customer. The service performance scored 26% which is the combination of the service performed as well as the dealer's ability to fix a problem on the first visit. Service Reliability scored just 6%. This is the time taken for a service or repair job and if the vehicle was ready at the time promised. The other factor promoting customer satisfaction is the Facility Appearance - the customer lounge at the dealership and the general appearance and cleanliness of the service area. This factor has 5% contribution on CSI score.

The Indian market is extremely sensitive to fuel efficiency i.e. kilometers/ liter of fuel. While this sensitivity is generally seen among all types of owners, customers of pre-owned vehicles attach a significant importance to fuel efficiency. Among those intending to buy a pre-owned car, the average budget varies from about rupees 2 lacs for a small car to about 4 lacs for mid-sized cars. While small car manufacturers such as Maruti, Hyundai, and Tata Motors find strong preference among this group, the presence of Honda, Chevrolet, and Toyota too is significant. "The shift in four-wheeler market composition is already evident with car owners upgrading from two-wheelers accounting for a higher proportion of the market compared to 3-5 years back," observes Lochan. "The current findings validate that this growth will continue, given the rapidly increasing base of motorcycle owners. Car manufacturers offering premium compact models are likely to benefit most from this trend."

Maruti True Value customers enjoy all the advantages of dealing directly with India's most trusted car company. The company assures a customer of providing quality, reliability, transparency and convenience - all under one roof. Its strong network of 172 showrooms across the nation provides a very convenient option close to a customer location. (Kaur, 2005).

Kiley (2002) and Rusert & Wiseman (2003) have listed various advantages that the Manufacturer Certified Pre-owned Vehicle Programs offer to the manufacturers as well as to the buyers. Some of these are that the Manufacturer Certified Pre-owned Programs are designed to give buyers the chance to purchase a used car with complete confidence by offering some or all of the benefits like comprehensive vehicle inspection, extended warranties, strict qualification guidelines, roadside assistance etc. According to Sengupta (2001), Maruti Udyog Limited has fixed a target residual value for each car, each model and also charted out a 120-point checklist to shortlist the merits and demerits of the vehicle and according to it, the price is adjusted with the target residual value. Giriprakash (2005) opined that entrepreneurs have a huge opportunity in the pre-owned (used) car market, which, for the first time, is expected to outpace the new car market in the coming years. The concept of pre-owned cars through authorized dealers is in its nascent stage in our country.

Objective of the Study and Research Methodology

The present research was conducted to study factors affecting customer satisfaction for pre-owned four wheelers. Objectives of the study:

- Analyze demographic characteristics of respondents
- Identify factors promoting customer satisfaction towards pre-owned four wheeler in Uttrakhand state
- Assess the relationship of factors of customer satisfaction with demographic characteristics
- Assess the relationship between factors of customer satisfaction with overall product performance.
- To suggest the strategies for enhancing customer satisfaction for pre-used four wheeler in the state of Uttrakhand

To assess purchase behaviour and level of satisfaction of customers of pre-owned four wheeler the study was restricted to Dehradun District. A sample of 110 customers was taken and respondents interviewed individually. The customers were selected from the database provided by the dealers on the basis of their willingness to participate. Data was collected with the help of a structured, non-disguised questionnaire. The collected information was systematically arranged, tabulated and appropriate analysis was carried out. This section analyses demographic profile of customers, their purchase related behaviour and their satisfaction level towards their purchased car. Demographic profile of the customers has been studied based on their age, occupation and income level. Age is an important demographic variable, which reflects the buying behaviour of the target audience. The income level is the underlying factor on which the demand for used cars depends. It determines the purchasing power of an individual and helps in estimating the likely demand levels. Occupation of target customers of a particular product/service is an important determinant of their profile.

Data Interpretation

Table I shows that sample is dominated by those customers(36.4%) who are in the age group of 30-45 years, showing that middle and younger age group people are more in the possession of four wheeler. Majority of the customers (60% Approx) fall in the business and professional categories people. Sample is dominated by the income group ranging from Rs. 25000-Rs50000

of the customers, the main reason behind this trend is that higher income group can afford to buy a new car.

First time or repeat purchases, reasons for buying used cars, car financing, factors influencing the choice of a dealer, brand choice and evaluation criteria used by customers for purchase of cars gives an insight into the purchase behaviour of customers of four wheeler which has been discussed in the following section.

Table 1: Demographic Profile of the Target Segment

	Characteristics	No of Respondents	%
	Total Number of Respondents	110	100
Age	Upton 30 Years	29	26.4
	30 to 45 Years	40	36.4
	45 to 60 Years	27	24.5
	Above 60 Years	14	12.7
Occupation	Business	48	43.6
	Government Service	23	20.9
	Private Service	17	15.5
	Professionals	19	17.3
	Others	3	2.7
Annual income	Upto 25000PM	32	29.1
	25000 to Rs50000PM	49	44.5
	Rs50000 to Rs75000 PM	21	19.1
	Rs75000 and above	8	7.3

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of four wheeler. Majority of the customers (60% Approx) fall in the business and professional categories people. Sample is dominated by the income group ranging from Rs. 25000-Rs50000 of the customers, the main reason behind this trend is that higher income group can afford to buy a new car.

First time or repeat purchases, reasons for buying used cars, car financing, factors influencing the choice of a dealer, brand choice and evaluation criteria used by customers for purchase of cars gives an insight into the purchase behaviour of customers of four wheeler which has been discussed in the following section.

Table 2: Nature of Buyers

Sl No	Description	No of	Percentag
a	First Time Buyers of Four Wheelers	92	83.6
b	Repeat Buyers of Four Wheeler	18	16.4
	Total	110	100.0

Table 3 Nature of Purchase

Sl No	Description	No of	Percentag
a	Pre-owned car From Show Room	62	56.4
b	Second Hand From Market	48	43.6
	Total	110	100.0

Table 4: Nature of Buyers * Type of Car Purchased Cross tabulation

		Type of Car Purchased			Total
		Small Car	Midsized Car	Big Car	Small Car
Nature of Buyers	First Time Buyers of Four Wheelers	74	10	8	92
	Repeat Buyers of Four Wheeler	11	3	4	18
Total		85	13	12	110

In most developed countries, used vehicles are transition vehicles for buyers who are not ready to migrate to new vehicles. Data presented in the table 2 indicates that 83.6% of the customers are first time buyers of car and remaining 16.7% are the repeat buyer of the four-wheeler. These people are having previous experience of buying a car. The information pertaining to nature of purchase of four wheeler by the customer reveals that more than half (56.4%) of the respondents purchased pre owned car from showroom. In comparison to this 43.6% respondents purchased second hand car from the market. The cross table analysis of the data presented in the table no 4 indicated that out of 92 respondent who are the first time buyer of four wheeler , 74 have purchased small car, 10 respondent purchased mid size car and remaining 8 have purchased big car. Similarly out of these 18 respondent who are repeat buyer of four wheeler, 11 respondents purchased small car, 3 respondent purchased medium size car and 4 have purchased big car. An attempt was made to assess the relationship between purchase patterns of respondent with their level of income. Vicariate cross table analysis was carried out with the help of SPSS15 version software. It was hypothesis that there is no relationship between the customers purchase pattern with their level of income.

Table 5: Monthly Income * Type of Car Purchased Cross tabulation

		Type of Car Purchased			Total
		Small Car	Midsized Car	Big Car	
Monthly Income	Upto 25000PM	23	5	4	32
	25000 to Rs50000PM	41	8	0	49
	Rs50000 to Rs75000 PM	21	0	0	21
	Rs75000 and above	0	0	8	8
Total		85	13	12	110
Pearson Chi-Square		78.545(a)	6		

The calculated value of chi square value at 5% level of significance and 6 degree of freedom is 78.545 which are greater than the tabulated value (11.0705). Hence Null hypothesis is rejected indicating there is significant degree of association between the consumers level of income with the purchase of Car.

Analysis and Discussion

Understanding consumer behavior in buying and leasing new vehicles has been of a major interest for automobile manufacturers. Producers' marketing and operations decisions are

significantly based on the buyers' preferences and likings. These decisions are also influenced by exogenous factors such as economy condition and government policies, and market interaction among the major players like consumer, manufacturer and government. The empirical study indicates that consumers make purchasing decision based on their own personal attributes such as age and education, as well as vehicle attributes such as price and performance. Automobile manufacturers design products and set vehicles pricing according to consumer buying behavior. Government influences the process by means of increasing or decreasing taxes and creating new polices for product design and performance. Exogenous factors such as fuel prices may also impact both consumer purchase decisions and manufacturer decisions. These components are viewed together since they are highly interdependent and together represent forces that influence how the consumer will react to the object. Keeping these into consideration, an attempt was made to assess the consumer's satisfaction from the different factor influencing in favour of their purchase. For this respondent were asked to rate their views on the following statement such as overall product performance affect my level of satisfaction, minimum waiting time and optimum time in delivering the services enhance my satisfaction, operating cost of the vehicle affect my satisfaction, the cost of spare part affect my satisfaction, the product information provided by staff member satisfy me, Responsiveness of the dealer, behaviour of the staff member dealing in front desk increases my satisfaction, Accessibility of service centre enhance the level of satisfaction, the coordination between the carious department like store, sales, account, customer care, and marketing enhance my satisfaction, Maintenance Costs associated with the vehicle affects my satisfaction, enhance Riding comforts leads my satisfaction level, guarantee and warrantee extended by company and distributor increases my satisfaction towards product, the test drive facility provided by the dealer increases my preference towards the product, the time devoted by salesman to handle my objection attract me in the favour of the product, the variance in the mileage as achieved from claimed affects my satisfaction, the cost associated with the services affects my level of satisfaction, ambiance of the store attract me most infavour of the product, Easy availability of loan attract me most in the favour of the product, sales promotion scheme offered by the dealers attract me most in favour of particular four wheeler, For this purpose, respondents were asked to rate the various statement on a scale of 1 to 5 in order of their preference. The exploratory factor analysis was used in order to identify the various motivational factors of purchase of two wheeler. Principal Component analysis was employed for extracting factors and orthogonal rotation with Varimax was applied. As latent root criterion was used for extraction of factors, only the factors having latent roots or Eigen values greater than one were considered significant; all other factors with latent roots less than one were considered insignificant and disregarded. The extracted factors along with their Eigen values are shown in table 6. The factors have been given appropriate names on the basis of variables represented in each case. The names of the factors, the statements, the labels and factor loading have been summarized in Tables 6. There are six factors each having Eigen value exceeding one for motivational factors. Eigen values for six factors are 6.204, 2.310, 1.734, 1.523, 1.208, and 1.137, respectively. The index for the present solution accounts for 74.298% of the total variations for the motivational factors. It is a pretty good extraction because we are able to economise on the number of choice factors (from 19 to 6 underlying factors), we lost 25.702 % of information content for choice of variables. The percentages of variance explained by factors one to six are 32.654, 12.159, 9.124, 8.016, 6.359, and 5.987, respectively. Large communalities indicate that a large

number of variance has been accounted for by the factor solutions. Varimax rotated factor analysis results for motivational factors are shown in table 5 which indicates that after 6 factors are extracted and retained the communality is .859, for variable 1, .675 for variable 2, 0.668 for variable 3 and so on. It means that approximately 75 % of the variance of variable 1 is being captured by extracted factors together. The proportion of the variance in any one of the original variable which is being captured by the extracted factors is known as communality (Nargundkar, 2002).

Table 6: Principal Component analysis with Rotated Component

	Component						Communi nality
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	
Maintenance Costs associated with the vehicle affects my satisfaction	.859						.861
the coordination between the carious department like store,sales,account, customer care, and marketing enhance my satisfaction	.675						.761
the product information provided by staff member satisfy me	.668						.801
behaviour of the staff member dealing in front desk increases my satisfaction	.647						.691
Easy availability of loan attract me most in the favour of the product	.542						.746
the time devoted by salesman to handle my objection attract me in the favour of the product	.541						.616
the test drive facility provided by the dealer increases my preference towards the product		.879					.681
sales promotion scheme offered by the dealers attract me most in favour of particular four wheeler		.813					.587
guarantee and warrantee extended by company and distributor increases my satisfaction towards product		.722					.753
operating cost of the vehicle affect my satisfaction			.843				.813
Accessibility of service centre enhance the level of satisfaction			.701				.796
Responsiveness of the dealer			.576				.675
ambiance of the store attract me most infavour of the product			.501				.830
enhance Riding comforts leads my satisfaction level				.806			.779
minimum waiting time and optimum time in delivering the services enhance my satisfaction				.724			.873
the cost of spare part affect my satisfaction				.616			.763
the variance in the mileage as achieved from claimed affects my satisfaction					.856		.696
the cost associated with the services affects my level of satisfaction					.814		.556
overall product performance affect my level of satisfaction						.899	.838
<i>Eigen Values</i>	6.204	2.310	1.734	1.523	1.208	1.137	
% of Variation	32.654	12.159	9.124	8.016	6.359	5.987	
Cumulative % of Variation	32.654	44.813	53.937	61.953	68.311	74.298	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

A Rotation converged in 9 iterations.

Table 7: Principle components and associate variable

Factor	Name of Dimension	Statement	Factor Loading
F1	Service quality and relationship factor	Maintenance Costs associated with the vehicle affects my satisfaction	.861
		the coordination between the various department like store, sales, account, customer care and marketing enhance my satisfaction	.761
		the product information provided by staff member satisfy me	.801
		behaviour of the staff member dealing in front desk increases my satisfaction	.691
		Easy availability of loan attract me most in the favour of the product	.746
		the time devoted by salesman to handle my objection attract me in the favour of the product	.616
F2	Sales promotion factor	the test drive facility provided by the dealer increases my preference towards the product	.681
		sales promotion scheme offered by the dealers attract me most in favour of particular four wheeler	.587
		guarantee and warrantee extended by company and distributor increases my satisfaction towards product	.753
F3	Dealers Responsiveness	operating cost of the vehicle affect my satisfaction	.813
		Accessibility of service centre enhance the level of satisfaction	.796
		Responsiveness of the dealer	.675
		ambiance of the store attract me most infavour of the product	.830
F4	Riding comfort and service delivery factor	enhance Riding comforts leads my satisfaction level	.779
		minimum waiting time and optimum time in delivering the services enhance my satisfaction	.873
		the cost of spare part affect my satisfaction	.763
F5	Fuel efficiency and operating cost factor	the variance in the mileage as achieved from claimed affects my satisfaction	.696
		the cost associated with the services affects my level of satisfaction	.556
F6	Overall Product Performance	overall product performance affect my level of satisfaction	.838

Principal components & associated Variables indicates that first factor (Service quality and relationship factor) indicating the customers preferences towards the quality of services provided by the manufacturer and channel partner. this is the combination of variable like Maintenance Costs associated with the vehicle affects my satisfaction, the coordination between the various department like store, sales, account, customer care, and marketing enhance my satisfaction , the product information provided by staff member satisfy me, behaviour of the staff member dealing in front desk increases my satisfaction, Easy availability of loan attract me most in the favour of the product and the time devoted by salesman to

handle my objection attract me in the favour of the product and accounting 32.654% variance of the total variances. The second Factor is the sales promotion factor which is the combination of the variable like the test drive facility provided by the dealer increases my preference towards the product sales promotion scheme offered by the dealers attract me most in favour of particular four wheeler guarantee and warrantee extended by company and distributor increases my satisfaction towards product and accounts 12.159% variance of total variance. Third factor is the dealers responsiveness which is the combination of operating cost of the vehicle affect my satisfaction, Accessibility of service centre enhance the level of satisfaction Responsiveness of the dealer ambiance of the store attract me most in favour of the product and account 9.124% variance of the total variances. Fourth factor is the Riding comfort and service delivery factor which include the variable like enhance Riding comforts leads my satisfaction level minimum waiting time and optimum time in delivering the services enhance my satisfaction the cost of spare part affect my satisfaction and accounts 8.016% of total variance. Fifth factor is Fuel efficiency and operating cost factor which is the combination of variable like the variance in the mileage as achieved from claimed affects my satisfaction the cost associated with the services affects my level of satisfaction and account 6.359% of total variance. Sixth factor is the Overall Product Performance which account to 5.987% of total variance.

Table -8Level of Satisfaction of Different Factors across Different Occupation Report

Occupation	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6
Business	3.6736	3.7361	3.4167	3.4236	3.5521	3.4792
Government Service	3.5290	3.6667	3.0109	3.2464	3.3913	3.9130
Private Service	3.4706	3.5490	3.3529	3.3333	3.0000	3.0000
Professionals	3.0263	3.1228	2.6711	2.9298	3.2105	3.7368
Others	4.1667	4.6667	3.0000	4.3333	4.0000	4.0000
Total	3.5136	3.6121	3.1818	3.3121	3.3864	3.5818

Inference: As is evident from the mean satisfaction rating of various factors across different occupation, customers have high level of satisfaction from factor 2 i.e. sales promotional activities initiated by manufacturer and channel partners among all categories respondents. However government services professional are more satisfied with overall product performance as it scored highest mean among all.

One way ANOVA has been applied to test the significance of the difference between mean values of various satisfaction factor across respondents of various occupation assuming **Null Hypothesis (H₀)** as there is no significant difference on the level of satisfaction from different factors among the different occupational categories

Table9: ANOVA with occupation

		Sum of Squares	df	Mean Square	F	Sig.
Factor1	Between Groups	8.326	4	2.082	2.965	.023
	Within Groups	73.714	105	.702		
	Total	82.041	109			
Factor2	Between Groups	8.759	4	2.190	1.970	.104
	Within Groups	116.691	105	1.111		
	Total	125.451	109			
Factor3	Between Groups	8.873	4	2.218	2.898	.025
	Within Groups	80.365	105	.765		
	Total	89.239	109			
Factor4	Between Groups	6.609	4	1.652	2.221	.072
	Within Groups	78.119	105	.744		
	Total	84.728	109			
Factor5	Between Groups	5.574	4	1.393	1.882	.119
	Within Groups	77.756	105	.741		
	Total	83.330	109			
Factor6	Between Groups	15.274	4	3.819	2.647	.037
	Within Groups	151.489	105	1.443		
	Total	166.764	109			

From the table it is clear that calculated value of F is greater than the tabulated value of F (2.37) at ($p < 0.05$) level of significance in the case of factor 1, factor 3 and factor 6. Hence null hypothesis is rejected indicating that there is significant difference in the mean of different satisfaction factor across the respondents of different occupation. In comparison to this calculated value of F is lesser than the tabulated value of F (2.37) at ($p < 0.05$) level of significance in the case of factor 2, factor 4 and factor 5. Hence null hypothesis is accepted indicating that there is no significant difference in the mean of different satisfaction factor across the respondents of different occupation.

Conclusions and Suggestions

Customer satisfaction, a business term, is a measure of how products and services supplied by a company meet or surpass customer expectation. It is seen as a key performance indicator within business in a competitive marketplace where businesses compete for customers; customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy. There is a substantial body of empirical literature that establishes the benefits of customer satisfaction for firms. Measuring customer satisfaction provides an indication of how successful the organization is in providing products and/or services to the marketplace. The usual measures of customer satisfaction involve a survey with a set of statements using a Likert Technique or scale. The customer is asked to evaluate each statement in terms of their perception and expectation of performance of the service being measured. The analysis indicates that majority of the respondents are First Time Buyers of Four Wheelers in the Utrakhand state. They prefer to purchase new small Car from Show Room. It was also found that there is significant degree of association between the consumers level of income with the purchase of Pre owned Car. It is also found that sales promotion scheme, Service quality and relationship factor, Dealers Responsiveness, product features like Riding comfort and service delivery factor, Fuel efficiency and operating cost factor are the most important factor leading customer satisfaction and long term bonding towards product.

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Trust is defined as the confidence that the customer has in the integrity and reliability of the salesrep (Andaleeb 1992; Anderson and Narus 1990; Moorman, Deshpande and Zaltman 1993; Morgan and Hunt 1994). There is an explicit recognition that the salesrep will not take unexpected actions that may result in negative consequences (Anderson and Narus 1990). Trust in a salesrep is developed through repeated interactions in which the customer observes the salesrep to be consistent, competent, honest, fair, responsible, and benevolent (Altman and Taylor 1973; Larzelere and Huston 1980; Rotter 1971). Thus, the salesrep's trustworthiness is viewed as being grounded in observable behaviors, and specific actions, it is not just a latent trait of the individual.

Customer Satisfaction

The goal of relational exchange is more complex than tangible outcomes such as sales dollars. Increasingly, firms are using customer satisfaction measures as part of their incentive compensation plan in addition to traditional measures of effectiveness such as sales, sales to quota, and gross margin (Lambert, Sharma and Levy 1997). While there are many specific aspects of customer satisfaction (e.g., service, order fulfillment, and the interpersonal relationship with the salesrep), I consider more general aspects of satisfaction that have been more widely considered in the literature to date. This is consistent with Geyskens, Steenkamp and Kumar (1999), who conceptualize satisfaction in both economic and noneconomic terms. Specifically, I investigate the customer's global satisfaction with the relationship, and satisfaction with products and economic returns; these aspects were first identified by Ruekert and Churchill (1984) and have been considered in numerous channel relationship studies since then.

“CONSUMER BUYING BEHAVIOUR TOWARDS FAST FOOD RESTAURANTS: AN EMPIRICAL ANALYSIS”

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ABSTRACT

Food consumption patterns are undergoing substantial change in many countries as economic development proceeds. Liberalization of the Indian economy in the early 1990s and the subsequent entry of new players set a significant change in lifestyles and the food tastes of Indians. In recent years, a major food consumption trend in urban parts of country is that more consumers are eating increasingly more meals outside of their homes. Most of the growth in away-from-home eating has been in the fast food sector. This paper seeks to estimate importance of various attributes affecting the choice of fast food outlets and preference of fast food outlets by Indian young consumers. The study also measures the satisfaction level of consumers with respect to fast food consumption. A sample of 100 fast food restaurant patrons, Dehradun, was examined as it is a cosmopolitan city with residents from different states speaking different language and belonging to different subculture. The study would help understand the Fast Food consumption behavior of urban young Indian in general.

Key Words: - Fast Food, Young consumer.

Introduction

Out-of-home eating and drinking is an essential part of modern life and usage is likely to increase with time. Ritzer (1996; 2002) and Schlosser (2002) argue that fast food can be seen as a powerful symbol of globalization and post-modern society. With times due to increasing awareness and influence of western culture, there is a slight shift in food consumption patterns among urban Indian families. This eating out trend has flourished the coexistent of traditional and fast food restaurants in India. *Traditional Restaurant* is defined as non-fast food, processes of differentiation, with full or partially services that can be extended to cover many ethnic food operations (Wood, 1994). A *Fast-Food Restaurant* is characterized as quick services of franchised restaurant chain, which supplied the food quickly after ordering and minimal service offering for dining and take- out facilities (Elliot and Reed, 1999). *Fast Foods* are quick, reasonably priced, and readily available alternatives to home cooked food. While convenient and economical for a busy lifestyle, fast foods are typically high in calories, fat, saturated fat, and sugar.

Indian food industry is worth over \$400 billion (€304 billion). Urban Indians spend up to 43 % of their income on food with food consumption growing at an annual average rate of 10%. Fast food industry is getting adapted to Indian food requirements and is growing in India. It is gaining acceptance primarily from Indian youth and younger generations and is becoming part of life. Fast food is a very fast growing industry in world as well as in India especially in urban areas. According to the findings of an online survey from AC Nielson, India being at the seventh place, is among the top ten markets for weekly fast food consumption among the countries of Asia-Pacific region. Therefore, it is necessary and important to understand the factors influencing Fast Foods Consumption behaviour. Especially in the changed scenario of increased organized retailing in India the nuances of the changed consumer needs to be understood well. The major determinants of changes in the structure of Indian food trade includes income growth and food expenditures, factors of production, taste, convenience and availability, cost and value, social drivers and communication, region, new trends and lifestyles of consumers and trade policy changes. Of these determinants, income growth and its impact on food consumption are most important in explaining changes in trade patterns over this period.

The young Indians as a market segment are immensely significant in India in terms of both magnitude and spending capacity. One of the most important products consumed by the youth is Fast Foods. Therefore, it is important to study Fast Foods purchase behaviour of young Indians not only because Fast Foods are the most frequently purchased items by them but also because they become trend

setters and opinion leaders for Fast Foods Consumptions. An effort would, therefore, be made in this paper to understand the behaviour of urban young Indians for Fast Food.

Indian Fast Food Industry and Major Players

There are approximately 22,000 registered restaurants in India. In addition, there are more than 100,000 *dhabas* (small roadside food stalls) that sell a variety of foods in cities and on highways. By 2006, there were approximately 1,980 registered hotels in India, half of which have their own restaurants. In addition, large to medium-range canteens serve the food needs of various institutions such as hospitals, prisons, defense establishments, schools, colleges and universities, railways, airlines, government establishments, and private companies. After the liberalization policy that came in force in 1991, fast food industry grown in India as multinational fast food providers have set up their business either jointly with Indian partners or independently.

Table 1: Major Players of Indian Fast Food Industry

Restaurant	Headquarters	Founder	Key feature
McDonald	Oak Brook, Illinois, USA	Ray Albert Kroc	<ul style="list-style-type: none"> ➤ One of the world's most well-known and valuable brands ➤ Holds a leading share in the globally branded quick service restaurant segment
KFC (Kentucky Fried Chicken)	Louisville, Kentucky, USA	Harland Sanders	<ul style="list-style-type: none"> ➤ The world's most popular chicken restaurant chain ➤ Part of Yum! Brands, Inc., which is the world's largest restaurant system
Nirula's	India	Nirula's Family	<ul style="list-style-type: none"> ➤ Is a pioneer in the family style restaurant business in India
Pizza Hut	Addison, Texas,	Dan &	<ul style="list-style-type: none"> ➤ One of the flagship brands of Yum!

	United States	Frank Carney	Brands, Inc., is the world's largest pizza chain
Domino's	Ann Arbor, Michigan, U.S.	Tom Monaghan	➤ Established a reputation for being a home delivery specialist capable of delivering its pizzas within 30 minutes.

Objectives of the Study

1. To identify the Fast Food Restaurants' attributes that appeal to Indian Youth consumers and important for customer satisfaction.
2. To study the consumption pattern towards fast foods particularly with respect to the frequency of visits and choice of fast food outlets.
3. To measure consumer satisfaction regarding Fast Food Restaurants.

Hypothesis formulated for the study

H1: The satisfaction level of the customers and their choice of Fast Food Restaurant are independent.

Research Methodology

In order to establish what is provoking the gap between what fast food companies deliver and what consumers actually want, a pilot focus group was carried out. The major fast food outlets recall includes McDonald's, Pizza Hut, KFC, Domino's, Nirula's and Wimpy. A set of attributes are proposed that should be investigated as considered key to the Indian fast food industry. These are: Speed; Convenience;

Choice; Variety; Cleanliness; Presence of Friendly Staff and Price. These attributes were tested in association with the principal outlets identified.

Data was collected by Consumer surveys conducted using the intercept method at the selected traditional and fast food restaurants in Dehradun. Data was collected using a convenience sampling technique via a self-administered questionnaire. By using an intercept method, the researcher waited outside of the selected restaurant and chooses one customers out of every two who purchased their food and meals. These selected consumers were asked to voluntarily participate in the study. With that method, we managed to get 100 respondents from all restaurants. Out of total 100 respondents surveyed, 36 were from McDonalds, 22 from Pizza Hut, 18 from Domino’s, 8 from Nirula’s and 16 from KFC. The sample represents a cross section of the population regarding age, gender, income and educational background.

Analysis and Interpretation

➤ Demographics of the Respondents

Data were collected with respect to three demographics of the young Indian consumers, i.e. Gender (Male and Female), Education background (Non-graduate, Graduate, Post Graduate and Professional) and age (15-20 years, 21-25 years, 25-30 years, and 30-35 years).

Table 2: Demographics of the Respondents

Gender Distribution			
Gender	Frequency	Percent	Cumulative Percent
Male	64	64 %	64 %
Female	36	36 %	100 %
Total	100	100 %	
Education Distribution			
Education Level	Frequency	Percent	Cumulative Percent
Non- Graduate	4	4 %	4 %

Graduate	36	36 %	40 %
Post Graduate	12	12 %	52 %
Professional	48	48 %	100 %
Total	100	100 %	
Age Distribution			
Age	Frequency	Percent	Cumulative Percent
15-20 Years	9	9%	9%
21-25 Years	66	66%	75%
25-30 Years	21	21%	96%
30-35 Years	4	4%	100%
Total	100	100%	

On the basis of questionnaire administered the total number of male respondents were 64 (64%) and female respondents were 36 (36 %) of total sample size of 100. It represents a balanced gender distribution. The implication of the highest male response rate is two fold: men may be more inclined to fill in a questionnaire, but more importantly they are the driving force behind the fast food industry. The level of education is high as most of the respondents were professional 48 (48%) and graduate 36 (36 %). Total number of respondents who were Post-graduate 12 (12 %) and non-graduate were 4 (4 %). A total of 66 per cent respondents were in 21-25 years age category while 21 respondents were in 25-30 years age category..

- To analyze the Fast Food Restaurants' attributes that appeal to consumers, the mean value has been calculated on each Fast Food Restaurants' attributes which is shown below:

Table 3: Mean value of different Fast Food Restaurants on following attributes

S.N	Fast Food Restaurant	McDonalds	Pizza Hut	Domino's	Nirula's	KFC
.	Attributes	Mean Value	Mean	Mean	Mean	Mean

			Value	Value	Value	Value
1	Convenient Location of Restaurant	5.29	5.03	4.55	4.38	4.77
2	Promptness of the services	5.71	5.71	5.08	4.88	4.73
3	Reasonable Price of food items	5.38	5.13	4.88	4.95	5.21
4	Friendly & courteous manner of employees	5.38	4.92	4.14	4.4	4.46
5	Variety of menu items	5.17	4.46	4.29	4.98	3.77
6	Large Size portion	4.67	4.84	4.27	4.14	4.75
7	Consistent quality of Food	5.55	5.23	5.13	5.04	5.15
8	Restaurants opening hours	5.21	5.05	4.68	3.92	4.84
9	Appearance of facilities, employees etc.	4.88	4.32	4.96	4.57	4.27
10	Your experience about the waiting time for services	4.92	4.29	3.92	3.96	4.96
11	Parking space in the restaurant premises	5.71	5.23	4.84	4.68	4.38
12	Image of restaurant in community	5.38	5.19	4.4	4.29	5.26
13	Overall Satisfaction	5.21	4.92	4.77	4.98	5.04

On the basis of captioned analysis of mean value of different Fast Food Restaurant attributes, the overall ranking of the different Fast Food Restaurants has been done by obtaining the overall mean on all the attributes for each Fast Food Restaurant which is mention below: -

Table 4: Rating of Fast Food Restaurant

S.N.	Fast Food Restaurant	Mean	Rank
1.	McDonalds	5.266	1
2.	Pizza Hut	4.944	2
3.	KFC	4.738	3
4.	Domino's	4.608	4
5.	Nirula's	4.552	5

The above table 4 makes a comparative analysis of chosen Fast Food Restaurants. It clearly indicates the raking of chosen fast food restaurants by consumers on different attributes of these fast foods restaurants that appeal to consumers.

The results revealed that there were a total of 12 service attributes that were considered relevant to fast-food restaurant service quality. Myers (1999) suggested that importance ratings were one of the most straightforward but effective ways of measuring customer satisfaction and determining the relative importance of service attributes to service quality. As summarized in Table 3, the attribute considered most important in forming a perception of fast-food restaurant service quality is Consistent quality of food i.e. taste of food. The next three most important attributes were promptness in service delivery, reasonable price of food items and image of restaurant. On the other hand, appearance of facilities and employees, large size portion and restaurant opening hours were considered relatively unimportant.

Analysis of Satisfaction Level

To analyze the level of satisfaction of the respondents of the different Fast Foods Restaurants, the hypothesis were formulated and tested through chi square test as below: -

Table 5 Satisfaction level of Consumers

Restaurants	Very Much Dissatisfied	Somewhat Satisfied	Very much Satisfied	Total
McDonalds	1	20	15	36
Pizza Hut	2	13	7	22
Domino's	2	6	10	18
Nirula's	1	4	3	8
KFC	3	9	4	16
Total	9	52	39	100

Null Hypothesis (Ho): The satisfaction level of the customer and their choice of Fast Foods Restaurant are independent.

Alternate Hypothesis (Ha): The satisfaction level of the customer and their choice of Fast Foods Restaurant are not independent.

Chi-Square Test:-

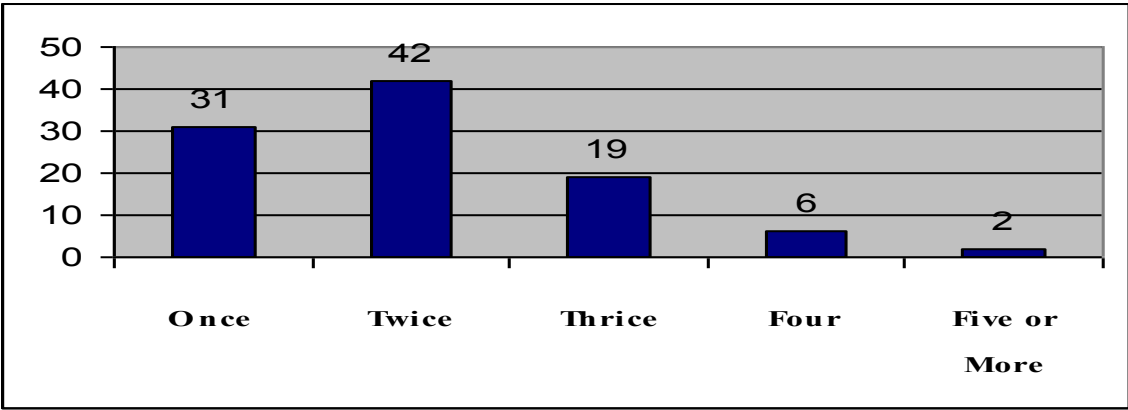
Calculated Value =7.4353

Degree of Freedom = 8

Table Value = 15.507 (at 5% level of Significance)

From the above analysis, it is found that the calculated value is less than the table value, i.e. null hypothesis is accepted. So there is no significant relationship between the choice of Fast Foods Restaurant and the level of customer satisfaction towards the services provided by the Fast foods restaurants.

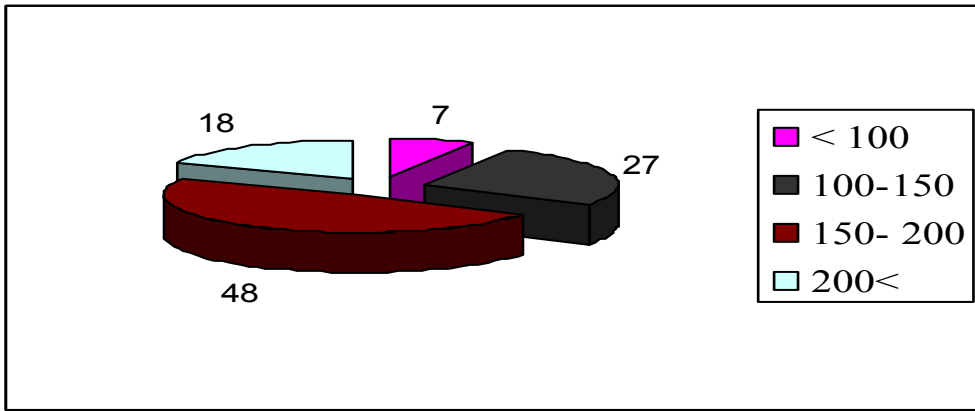
Frequency of Visit Fast Food Restaurants



Graph 1: Frequency of Visit

It was observed that 42% consumers showed their out-of-home eating frequency to fast food restaurants twice a week. It was then followed by once in a week by 31% consumers.

Amount Spent by consumer in a visit



Graph 2: Amount spent by consumer in a visit

48 % of the respondents were willing to pay from Rs. 150 to Rs. 200. This spent amount provides an understanding regarding the widest choice of products, from small pizzas, burgers meals to special sandwiches. 27 % consumers preferred to spend amount Rs. 100-150 in their each visit.

Discussion of Results

Food consumption patterns are undergoing substantial change in India. The young Indian consumers are looking for better quality services, more convenience, new delivery systems and safer and more hygienic foods. The study reveals the attributes of fast food restaurants that appeal to consumers and level of satisfaction with Fast Foods Restaurants.

Analysis of the overall mean value calculated to measure the behaviour of consumers about fast food restaurants attributes. The four important dimensions are identified viz; physical evidence dimension, service and delivery dimension, product dimension and quality dimension. It was also found that McDonalds is offering quality products and delivering better service to customers.

The study also indicates that out of home eating and drinking is an essential part of modern life. 42 percent consumers preferred to show their out of home eating frequency twice a week. Moreover, 48 percent of the consumers were willing to pay from Rs. 150- Rs. 200 in a visit. This spent amount provides an understanding regarding the widest choice of products from small pizzas, burgers meals to special sandwiches.

Conclusion

Results indicate that the young Indian consumer have assigned the highest value for quality and convenience followed by facilities and ambience. On the basis of captioned attribute analysis, four important dimensions fast food outlets' attributes are identified viz. physical evidence dimension, service and delivery dimension, product dimension, and quality dimension. The perceived attributes of fast food retailers meet the demand and product expectations of the Indian consumers. Fast-food restaurants need to achieve service excellence by constantly improving service performances. They also need to cater their service offerings to the dynamically changing preferences and needs of their customers over time. Indian fast food companies are responding quickly enough to satisfy these aspirations. Moreover, the information about hygiene value of fast food, convenience and prompt service must be communicated by these fast food restaurants, which will help in building trust in the food provided by fast food players.

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Social Networking-An Application in Network communication

By

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Abstract: *This paper focuses on the application of social networks in social network communication services, in this paper we have emphasis on the major application of social networking, social networking websites social networking services which are beneficial in the network communication .this paper also focuses on the utility of social networking in different major fields which are generally implemented by the general citizen.*

Keywords: Social Networks, Communication Networks

Introduction: Social networking is the grouping of individuals into specific groups, like small rural communities or a neighborhood subdivision, if you will. Although social networking is possible in person, especially in the workplace, universities, and high schools, it is most popular online. This is because unlike most high schools, colleges, or workplaces, the internet is filled with millions of individuals who are looking to meet other people, to gather and share first-hand information and experiences about cooking, golfing, gardening, developing friendships or professional alliances, finding employment, business-to-business marketing and even groups sharing information about the end of the Mayan calendar and the Great Shift to arrive December 21-2012. The topics and interests are as varied and rich as the story of our world.

When it comes to online social networking, websites are commonly used. These websites are known as social sites. Social networking websites function like an online community of internet users. Depending on the website in question, many of these online community members share common interests in hobbies, religion, or politics. Once we granted access to a social networking website we can begin to socialize. This socialization may include reading the profile pages of other members and possibly even contacting them.

The friends that we can make are just one of the many benefits to social networking online. Another one of those benefits includes diversity because the internet gives individuals from all around the world access to social networking sites. This means that although you are in the United States, you could develop an online friendship with someone in Denmark or India. Not only will you make new friends, but you just might learn a thing or two about new cultures or new languages and learning is always a good thing.

First social networks were the sites for communication and friend finding. Their functionality included personal profiles and messaging service. They were simple to use and had simple interfaces. As the time passed and the networks grew larger their market price also grew. The advertisers became interested in placing their ads on the social networking sites. The owners of these sites took serious steps to make people stay online longer and thus see more ads. Social

networking applications were a great solution to keep more people longer on the social networking sites.

Application of Social Networking

Social networking applications are the web-based widgets that are inbuilt into the site engine and allow registered users to interact with their features. These applications are developed by the companies and independent developers that have no connection to the social site administration. The main reason for serious players to allocate their applications within social networks is the possibility to earn money. While some features of the apps are free to use, the others have to be paid for. To pay for the use of application the user has to send an sms or enter the bank card details. Some people spend quite a lot of money on additional features because they become addicted to the application. There exist several types of applications depending on their primary function. They are used for media sharing, gaming and entertainment and socializing and finding friends.

The social networking applications that focus on media sharing most often come in the form of playlists. These playlists allow creating personalized lists of songs or video clips that can be embedded on the profile page or sent to a friend as a link. The application connects to the database that is located on the server and plays streaming music and video. Users love these applications to the extent that they agree to pay for them. Certainly, it's very comfortable to have the personalized playlist at hand whenever you log in to your page; and there's no longer the need to download music and carry it along on the flash drives.

The applications for gaming and entertainment are the important part of almost any social network. They can keep the user online the longest and make him/her spend the most money. They often become addictive like other online games. Social networks can now offer a wide range of genres and game plays: arcades, puzzles, intellectual games, shooters, races and many others. The basic functionality of the games is usually available free of charge. To use the extended version or extra features one has to pay.

Socializing and finding new friends is made possible with the special type of social networking applications. At the first sight they can look as games, but their specific feature is that they allow real-time chatting and relevant information exchange. The great examples of such applications are the dating games, where people can find matches by answering the questions or doing tasks. there are some major application areas of social networking

1. Social networking services for network communication

Sometimes social networking services mean online community services. The only difference is that SNS usually means an individual-centered service while online community services may be group-centered. Social networking sites are usually used for sharing ideas, events, activities, and interests within users' individual networks.

Sometimes social networking services mean online community services. The only difference is that SNS usually means an individual-centered service while online community services may be group-centered. Social networking sites are usually used for sharing ideas, events, activities, and interests within users' individual networks.

Web based social network services are used for connecting people with the same interests

and activities across political, geographic and economic borders. Reciprocal altruism and a gift economy can be encouraged through instant messaging and e-mailing, online communities and co operations.

Category places and a recommendation system linked to trust are the main services of social networking websites. Category places, as classmates or former school-year, is used for connecting people with self-description pages. Most popular social networking services are combined in many social websites, for example, Twitter (<http://twinner.com>) and Facebook (<http://www.facebook.com>) are widely spread worldwide; MySpace (<http://www.myspace.com>) and LinkedIn (<http://www.linkedin.com>) are used in the North America, Odnoklassniki (<http://odnoklassniki.ru>) and VKontakte (<http://vkontakte.ru>) being widely used in Russia and Ukraine, etc.

Many social networking services, like MySpace or Facebook, give their users with a choice of profile privacy. This prevents unauthorized user from accessing their personal information, users can select who may see their page, allowing only people added as "friends" to view their profile.

Such concerns, as users giving out personal information too much and threat of sexual predators, have been growing on large social networking services. Theft or viruses make users of these services to be always aware. However, large and popular services, like Netlog (<http://www.netlog.com>) and MySpace work with law enforcement for prevention such incidents.

Web-based social networking services contain social network hosting service for the user creation alongside related applications. Such services are usually called vertical social networks due to the creation of social networking services which cater to user niches and interests, such services possess the ability for creation users' increasingly-niche groups.

Use social networking services, communicate and exchange information, but never forget that it may cause concern regarding the potential of its misuse by individual patrons and may be used in legal and criminal investigations by policy and other people.

2. Social Networking Aggregators

Social networking aggregators are the applications or browser widgets that help to unite the information stream from different social network profiles in one place. They are designed to simplify and fasten the use of social networks. The aggregators have gained great popularity because people liked the idea of saving time and still getting what they want automatically. The users that have their profiles on many social networks like using social networking aggregators to follow their multiple pages and organize their updates. With these applications there's no longer any need to jump between multiple screens and refresh the pages constantly. Everything is delivered to a single application.

The aggregators perform two basic functions. They are capable of pulling together all the incoming information from the users in your friend lists irrespective of the social network and the type of change that have been made. These applications make following friends' activity very easy. Nobody's updates get lost or ignored. You always see what you need to comment or evaluate and about what you have to talk with your friend. Some social

networking aggregators are able to show 'lifestreams', that is to send you the notifications right after you received the message or some change has been made. The other function is consolidating many profiles in one place. The users thus get the great ability to see what they updated, when and on what social network. That helps avoiding double posts and omission of some networks. This function is widely used by people who do business via social networks. Social networking aggregators help them to create the calendars of updates and thus make the information input very effective.

To use the application or widget one has to download and install it first. The exception is web-based services, but they cannot boast of such variety of functions as the installed applications have. After the installation one has to input the logins and passwords to the networks the application has to incorporate. Once the application is logged in one can start adjusting the notifications and browsing options.

The most popular social networking aggregators are FriendFeed (<http://friendfeed.com/>) - it allows sharing content of Twitter (<http://twitter.com/>), Facebook (<http://facebook.com/>) and Flickr (<http://flickr.com/>); Minggl (<http://www.minggl.com/>) - it allows communicating with all your contacts from one place, it is a very popular browser widget; Tweetdeck (<http://tweetdeck.com/>) - it incorporates the majority of the most popular social networks and provides real-time access to the uploads and posts; Netvibes (<http://tour.netvibes.com/overview.php>) - is an aggregator of information, that can help you collecting in one place the blogs, e-mail services, social networks, news and weather sites and many much more useful data. As we see, the choice is big. Everyone can find some social networking aggregator to his/her taste and use it effectively to simplify the social networking process.

3. Music social networking

Can you imagine your life without music? Nowadays music is everywhere. We can listen to it 24 hours a day; we can go to the concerts of our favorite singer or band, switch on the radio, put MP3 disk into our CD-player or just use music social networking. And music social networking helps us to find and share our favourite music and widen our musical scope.

The last one is the easiest and newest way of listening to your favourite songs. At first let's define what music is. Music is an art form, and sound is its medium. Common elements of music are pitch (harmony and melody), rhythm (meter, tempo, and articulation), dynamics, and the sonic qualities of texture and timbre. It may be classified as a fine art, a performing art, and auditory art.

I dare to say that music is an important part of way of life of every person living in the world. Common sayings like "it is music to my ears" or "the harmony of the spheres" mean that music is pleasant to listen to. And now let me help you to find a kind of music you like. There are millions of music social networking websites with an integrated music listening service for free. You'll find a great list on the Internet! There are so many amazing and marvellous website now for music lovers and for artists.

More established and larger social networking and artist sharing sites such as Bebo (<http://www.bebo.com>), MySpace (<http://www.myspace.com>), MP3.com, Peoplesound (<http://peoplesound.com>) or YouTube (<http://www.youtube.com>) where users can download their favourite songs, submit music, new or unsigned bands have the opportunity to sell their music online.

MusoCity is a free music-oriented social network, providing accounts specifically designed for musicians, artists, music fans, music venues and music retailers.

Haystack is a social network for music searchers. After creating your own profile you can browse music, videos, pictures and reviews of artists. Artists can sign up directly or through their manager or own label.

If you are an artist and you want to promote your music choose Sonific (<http://www.sonific.com>). This music social networking site lets users put free music widgets with your own music and promote it to audiences. Other users of Sonific can use and listen to music for free, but downloading is not permitted.

Discovering of new music and musicians is very easy with a network Midomi. By singing or humming part of a song you can find the whole song and it is really cool. A microphone will be enough for connecting to your favorite music, here you will be able to listen to other member's voices, send messages rate singers, see pictures, and buy music.

iJigg is a music social network, where commenting on music and sharing songs is available. The rating and popularity of the song depends on you.

Sellaband (<http://sellaband.com>) is an online community where the fans and listeners of bands may become producers, so musicians can get a recording opportunity. And producer of a successful band can get a small cut of the profits and 50% of the ad revenue coming from downloads of music. iLike is a service helping you to organize your music, share music tastes, share music libraries with your friends, and even discover new artists through your friends. As we see the Internet gives the opportunity not only browse, share, and listen to your music anytime, but even get money for pleasant spending of your time. So live, sing, enjoy, communicate and use music social networking sites for your please!

4. Social Network Unifier

Lately it became very popular to register an account on social networking sites. People got so many possibilities to entertain themselves due to the appearance of such websites. And of course with the growth of popularity of each site, people got to have few accounts on different web pages. For example, not so long ago in CIS countries only Odnoklassniki (www.odnoklassniki.ru) and V Kontakte (www.vkontakte.ru) were popular, but now it is also Facebook (www.facebook.com), Twitter (www.twitter.com), MySpace (www.myspace.com) and YouTube (www.youtube.com). And now let's imagine how much time every person wasting on checking each of those websites. Checking what new

happened on Facebook, answering messages, commenting and rating photos, then doing same on few other accounts. After realizing that this becomes not very comfortable, developers decided to make a so-called social network unifier.

It is the system that gives an opportunity to collect all the content from your accounts on one website. Social network aggregation gathers together all the information from your registered accounts. It is easier to log in into one location and be able organize information from one web page. There are different social aggregation tools and online gadgets that give an opportunity to bring together messages from every account, and give a possibility to answer them from one location. Person is able to watch friends and keep an eye on their every day activity. It also gives an opportunity to surf through whole social networking sites. User is able to observe if he/she is being mentioned by other users on their accounts, also able to add pictures to one of accounts or to few of them, user is having a simple access to all his profiles using one interface, able to follow his friends and participate in alive conversations and discussions.

Social network unifier is intended to ease our everyday life. If we are not able to organize our time or simply not to use social networking websites we need to admit that we need a simple interface. With the appearance of so many websites we are wasting too much time just entertaining ourselves. Especially teenagers, who spend too much time near computer screen almost forgetting about advantages of real communication. But even elders are very fond of spending time on social networks. It is not surprising that most of big companies and manufacturers close an easy access to social networks at work. CEO's understood that instead of following responsibilities employees spend a lot of time answering messages and checking news feeds.

Number of social networking sites grows with every day, and definitely their popularity grows too. Every site is trying to add special widgets or applications that will attract users. We can't imagine a thing that we won't be able to do on Internet now. Maybe social network unifier is the only way to save our time in future, though it is up to everyone how to organize his/her time. And of course it is up to everyone to decide if there is a need to have multiple accounts all over the virtual world, because it will never change a real communication between two people.

5. Social Networking In Education

Gone are the days when students had to go to the library and spend much time searching for necessary information, or run around with the hope to find the needed book. You had to waste plenty of time sitting in the library and writing down into your papers. It took so much time! Instead of hanging out with your friends in the evening or on weekends you was sticking in the library for the whole day. Moreover it didn't mean that you found all required information. Certainly there was already Internet but it was not so popular and many people were just afraid of using it. Internet wasn't so commonly-used. Now when I see how it is easy to find any information just with one click in Internet I realize that I could study better. To my way of thinking Internet is one of the most important and great inventions in the world. We are becoming an increasingly social society. Social networking sites allow users to collaborate, interact with the environment

around them as well as with each other. Speaking about education learning is always about content, context and collaboration and social networking sites combine all these elements. With the new applications arriving as part of the Web 2.0 wave of innovation we can see how learning can be dramatically accelerated and made immediately actionable.

It is still cutting edge. They are becoming tremendously useful for knowledge and valued information sharing. Future college students are already participating in online social networks, consuming digital media and starting creating digital content.

These sites have nothing to do with sharing photos of your holidays or pets but working collaboratively with people who have similar goals as you. In a virtual learning environment you can find teachers, researchers and students collaborating, sharing work and helping each other. And they aim to bring people together in meaningful ways and have a lot more than just static text information. One can easily find edu-bloggers, articles, notes and an increasing number of print books and it is no longer surprising that professors podcast lectures and course notes and students can take advantage of using it.

Some of learning social networks offer students blogs or sections where students ask questions and seasoned researchers answer them.

According to the survey 60 % of students who use social networks talk about education online and more than 50% of them talk specifically about schoolwork. I must admit it is an astonishing statistic. On the ground of this statistic we see that young people and teenagers not only chat, share photos but also attach importance to education topics.

Teachers also can harness internet potential because it could be worthwhile for them to consciously think of projects and assignments to be executed through networking approaches. That can be good for professional development and integration both students and staff in the networking space. Higher schools are already keeping abreast of the time and give teachers time and freedom to learn, experiment and play. As for schools they are in many cases old-fashioned and so school board also has to decide this is valued for the whole school community.

6. Best Social Networking in Social Communication

It will be appropriate to start from defining what social network is. Social networking websites are blogs, chat rooms, dating sites, friends making sites. Social networking sites intended to unite people depending on their interests, same school or university, common likes or dislikes, dating or friendship. Usually on such sites you are able to create your own page (account) and fill it with your personal information (place of work or studying, interests, etc.) Also you are able to create photo albums, add your personal pictures and pictures of your friends. You are also able to make your page private or public, which is definitely very comfortable, taking into consideration fact about sexual harassment on Internet and different kind of spammers.

Nowadays there are so many social networking websites, that it will be very hard to name all. But the most popular social networks are: Facebook (www.facebook.com), MySpace (www.myspace.com), Orkut (www.orkut.com), Hi5 (www.hi5.com), Twitter (www.twitter.com), Livejournal (www.livejournal.com), Vkontakte (www.vkontakte.ru) – last one is popular in CIS countries. All of them are almost same and provide common services. But there are few peculiarities about each. Facebook unites friends and is popular all over the world. MySpace, Orkut, Hi5 are more popular in USA and Eastern Europe. Livejournal and Twitter are also popular worldwide, but they are more like blogs and intended for sharing news. Vkontakte is almost the same as Facebook, but only for Russian speaking countries.

It is definitely very hard to define what best social networking site is. There are a lot of argues and administrators of sites try to add more and more features to web pages to make their site more comfortable and entertaining.

There are top 100 charts on Internet that try to define best social networking site. Usually they just judge by the amount of registered users. But that can't be a factor because there are a lot of people who have account on every popular social networking site. Some of them use all of accounts and someone just registers, has a preview and then just simply keeps it, but checks very rarely. Person just can't be active on every site, it is physically impossible for an active person. So it is hard to define best social networking site using such factors. As for me, my personal favorite is Vkontakte. Not because it is special or has some other features, but because most of my friends are also registered on this site. There are a lot of applications that make this website very entertaining and fun. And it is not only about existing friends. It is about being able to make new friends. You can do search and find people from same city or country and start a pleasant conversation. Thus, as a conclusion it is up to everyone to choose what they like more. Someone may choose simplicity, other can choose site filled with various applications and more comfortable for business people. Every person chooses for himself his best social networking website.

Social Network Tools

Social networks are the sites we cannot imagine our lives without. They have become the important part of our social life. Many would say that the communication would never be the same; social networking has made it totally different from what it was in the pre-Internet era. The total popularity of social networks induced the software developers to pay more attention to the application that are connected to such sites. The efforts have been made to make the access and use of social networks easier. The newly developed social network tools successfully cope with this task.

There are three main types of social network tools depending on their technology. There are tools that exist in the form of websites. Usually they allow working with multiple social networks. Sometimes they are used to gain access to the social networking sites if they are blocked and cannot be accessed directly. The good thing about these sites is that they can be accessible from every computer in every part of the world. Other type of social network tools has to be installed on the computer. These applications are good

because they usually have more functions than web-based services. But they are limited only to one working station. That's not a problem if the application is installed on the laptop, because the laptop often travels with its owner. But on the desktops they can be used only if the owner of the computer is at the place where the desktop is installed. The third type of social network tools is the tools for portable devices - mobile phones, smart phones and PDAs. These applications are very popular because they help to save the traffic that often costs much for the mobile devices and nevertheless make social networks accessible.

Why do many people choose to use social network tools instead of just using the functionality of social networks? The tools make posting easier. It is especially obvious on the example of blogs and microblogs. For example, mobile posting tools for Twitter (www.twitter.com) make it possible to update the microblog as often as you want, no matter where you are and what you do. Besides, posting tools have a useful function of automatic posting. The user has to type the message into the application and set the time when the message will appear on the site. The user also has to ensure that there would be stable Internet connection in the time of posting. The application would do the rest.

The social network tools also make following easier. Usually we don't have time to look through all the updates from our friends in every social network we are registered in. The networking applications help to choose the news of what type you want to follow and from whom. Most of the social networks do not have the real time notification system. That means that one has to reload the page to see the changes. That's very uncomfortable if you wait for the message and don't know exactly when it would be sent. The social network tools will send the message notification to your desktop so that you know exactly when to check back to your social network profile.

1. Mobile Social Network

Do you want to know how to be online in all your social networking sites around the clock? The thing you keep in your bag or in the pocket of your jeans all day long can help you. Sure, it is precisely the mobile that can help you. Michael Schubert, Chief Innovation Officer for Ruder Finn, says that with mobile technology people don't have to be constantly in front of their computers because they can use their mobile phones to access social networking sites whenever and wherever they want. Mobile is one of the main resources for people to keep in touch with each other and vendors of social networking sites turn it to their advantage.

Now you are able to connect your family and friends through mobile social network as well. The amount of mobile social network sites and downloadable applications created by social networks is increasing all the time. The developers are working to extend the number of features and enhanced communication tools with an eye to offer them to mobile social networks. Did you know that mobile users spend more time on social network websites than PC users? So, mobile phone appears to be a better platform for social networking than the PC. I have recently found interesting information, namely, according to the newly published report from Pyramid Research, the number of mobile social networking users will increase up to 450 million users by 2014 in Europe. Due to

the proliferation of smart phones and a great number of their applications the popularity of mobile social network sites is permanently growing. Not all people can spend screen time by doing business related activities at the office, and at the same time surfing the Net on the go and jaunting over You Tube, Facebook and Twitter, scouring news sites, reading RSS feeds or downloading media and chatting with friends online. Thus and so mobile devices allow them to spend some extra hours on the Web when going in public transport or drinking coffee at the café.

Mobile social networking is the fastest web activity that enables consumers with 24 hour access to social networking services. Mobile phones help people to organize their lives by connecting friends, purchasing products, interacting with businesses, having the always-on and most measurable media at hand. Such wireless giants as Facebook and YouTube don't sit still, but invent applications for mobile phones so that their users have access to social networks across the globe and at any time. Venture capitalists invest in this business because it is quite a lucrative market and the revenue can be very fast. For instance Japanese McDonald's has also a mobile site with 16 million of registered users and the global brands such as Lufthansa and BMW are not exception as well. The countries which have tremendous growth in mobile Internet are the USA, the UK, and Brazil. So, don't fail to keep pace with life and join mobile social networking sites.

2. Free Social Networking

Free social networks are social platforms, websites that intended to connect people all over the planet depending on their common interests, likes, dislikes and same activities, etc. It can be friendship, dating, just sharing experience, earning money and so on. Most of free social networking sites are web based and connect people over the Internet; it can be either an e-mail or instant massaging (public or private). A registered user of the website is able to create their own page (account or profile). Everyone is able to organize his/her page the way person wants. Creating photo albums and add personal photos, add videos they like, share links with other users, and use a great amount of other additional services and applications.

The main formats of free social networking sites are ones which consist of category places (classmates or group mates, friends, same working place, camp friends, etc.) and aim to unite people (in most ways with the help of personal page with detail description of the owner). Although most of free social networking sites now combine all of the above mentioned. It would be appropriate to list most popular of free social networking websites. - Facebook (www.facebook.com) Twitter (www.twitter.com) and YouTube (www.youtube.com) are known and popular worldwide. MySpace (www.myspace.com), Orkut (www.orkut.com) and Hi5 (www.hi5.com) are mostly used by people who live in America. Friendster (www.friendster.com), Bebo (www.bebo.com) and Badoo (www.badoo.com) are most popular in Europe and Asia. V Kontakte (www.vkontakte.ru), Odnoklassniki (www.odnoklassniki.ru) and LovePlanet (www.loveplanet.ru) being used by people from Russia and CIS countries.

Most of them are very much alike, and there were tries to provide certain standards, to prevent duplication of entries, creating same accounts, and adding same friends and share same interests.

Not so long ago one more service became very popular. It is a mobile social networking. Now you are able to log in from a cell phone and do the exact same thing as from personal computer. Share photos, make friends, communicate with others in chat rooms, create and share blogs, post in forums and many more.

Some of the social network services were founded for promotional purpose. Such as advertisement banners on the website, or creating free groups and even sell goods through internet. It is definitely one of the easiest ways to earn money with low financial contribution.

There is one thing that bothers all the humanity though. This virtual communication is replacing the real one with time. Youth finds it easier to talk in chat rooms, rather than meet in life and have an eye-to-eye discussion. Another issue is a doubt in truthfulness of given information. It is easy to create a fake profile and bully people, stalk, cause drama and spread bad talks about each other. There are no actual rules about posting online, and it is hard to control very big communities. Maybe in future this issue will be solved and free social networks are going to be totally safe and useful.

3. Free social networking website

Social networking refers to a category of Internet applications to connect friends, relatives, business partners, or to acquaint with other people with the help of a variety of tools. The users of any free social network website can design their profile page to reflect their personality for free. The most popular extra features include music and video sections.

Members create their own online "profile" with biographical data, photography, likes, dislikes, school, university and any other information they choose to post. They can freely communicate with each other by instant message, voice, videoconference, chat and blogs.

With the help of social networking, people can use networks of online friends and memberships group for connecting with current friends, reconnecting with old friends or for creating friendships in reality through similar groups of interest. The user's personal profile in any free social network website is its soul and heart, where the user can express his feelings and thoughts, post pictures and boast his network of friends. The most popular social network sites emphasis the user's profile and their personality.

Sometimes the posting personal information can be a dangerous, that's why the profile privacy is an important feature of all social networks, and also they should have the ability to block and report users, to post profiles and update pictures. The music sections, video uploads, groups and more are important features of good social networking websites.

The finding friends and expanding relationships are the objects of a social network. Free social network website members can search for other members in an easy and safe to use environment, usual search functions include search by name, school, university, age, city, and email address.

Communicating and keeping in touch with friends, relatives, colleagues and classmates is the growing trend for social networks. The unsolicited spam friend requests can inundate user's profile.

The best free social network websites are:

- Facebook (<http://www.facebook.com>), it is number one in the world of social networks;
- MySpace (<http://www.myspace.com>), the second popular free social network website;
- Bebo (<http://www.bebo.com>), one of the most popular social networks of UK, New Zealand and Ireland;
- Reunion (<http://www.reunion.com>) specialized on ex-classmates search by all US and Canadian high schools;
- Flickr (<http://www.flickr.com>) and others.

Introduced in 2002, Friendster (<http://www.friendster.com>) was the first social network site (now 90 million members), followed by MySpace a year later. Facebook came out in 2004 and now it has 500 million members. Following Facebook were TagWorld and Tagged. MySpace has 130 million members.

LinkedIn (<http://www.linkedin.com>) has 75 million members and a powerful tool for business networking. Stumbleupon (<http://www.stumbleupon.com>) has over 10 million users, Delicious (<http://www.del.icio.us>) is a social bookmarking web service for sharing, discovering, and storing web bookmarks, and now is a part of Yahoo!

Conclusion: the paper emphasizes on the application of social networking in the social networks communication services, which interacts the communication of the one community to other community by which the whole world can connect with each other's communities for their good communication and for their social growth by that one community can share their ideas and views to other communities what they want to do.

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Paper Title:

E-Governance in India: Transformation in Approach

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E-Governance in India: Transformation in Approach

Abstract

E-governance is at its nascent stage in India with strong potential for growth in the future. The Information Technology (IT) industry is expected to be the major industry that stands to benefit. Government spending on IT is rapidly increasing which opens newer opportunities for the players in the IT space. It also provides growth prospects to various industries which are likely to benefit from the e-governance plan. The ongoing projects and the ones in the implementation stage are also set to offer greater exposure to the players in this space. Rise in demand for services and information by consumers across the nation has fostered the need for fast and smooth transfer of knowledge.

Key words: E-governance, Project, India

1. INTRODUCTION

“E-governance”, meaning “electronic governance”, has evolved as an information-age model of governance that seeks to realize processes and structures for harnessing the potentialities of information and communication technologies (ICTs) at various levels of government and the public sector and beyond, for the purpose of enhancing good governance (Bedi et al., 2001; Holmes, 2001; Okot-Uma, 2000).

According to Riley (2001): “e-governance is the commitment to utilize appropriate technologies to enhance governmental relationships, both internal and external, in order to advance democratic expression, human dignity and autonomy, support economic development and encourage the fair and efficient delivery of services”.

“E-government” commonly refers to the processes and structures pertinent to the electronic delivery of government services to the public. For instance, according to Gartner Consulting, e-government involves the use of ICTs to support government operations and provide government services (Fraga, 2002).

The terms government and governance have been widely disputed. Saxena (2005) draws a key distinction between ‘government’ and ‘governance’. He identifies the government as an institution, whereas governance may be seen as a wider concept illustrating forms of governance that can be undertaken not only by government authority but by private firms, non governmental

organization or associations of firms (Keohane & Nye, 2000). The challenge of e-governance in India lies in providing the service to about a billion people. At the moment, India is ranked 44th out of 122 in the global e-government readiness ranking of 2008 (TOI, 2008), which indicates significant room for improvement. The term e-Governance has different connotations:

- E-administration-The use of ICTs to modernize the state; the creation of data repositories for MIS, computerization of records.
- E-services-The emphasis here is to bring the state closer to the citizens. Examples include provision of online services. E-administration and e-services together constitute what is generally termed e-government.
- E-Governance-The use of IT to improve the ability of government to address the needs of society. It includes the publishing of policy and programme related information to transact with citizens. It extends beyond provision of on-line services and covers the use of IT for strategic planning and reaching development goals of the government.
- E-democracy-The use of IT to facilitate the ability of all sections of society to participate in the governance of the state. The remit is much broader here with a stated emphasis on transparency, accountability and participation. Examples could include online disclosure policies, online grievance redress forums and e-referendums. Conceptually, more potent.

Global shifts towards increased deployment of IT by governments emerged in the nineties, with the advent of the World Wide Web. What this powerful means to publish multimedia, support hyperlinked information and interactive information meant was a clearer avenue for G to C interactions and the promise of the attainment of the goals of good governance. Governments weighed down by the rising expectations and demands of a highly aware citizenry suddenly began to believe that there can be a new definition of public governance characterized by enhanced efficiency, transparency, accountability and a citizen-orientation in the adoption of IT enabled governance.

2. E-GOVERNANCE- ORIGINS IN INDIA

E-governance originated in India during the seventies with a focus on in- house government applications in the areas of defence, economic monitoring, planning and the deployment of ICT

to manage data intensive functions related to elections, census, tax administration etc. The efforts of the National Informatics Center (NIC) to connect all the district headquarters during the eighties was a watershed. From the early nineties, e-governance has seen the use of IT for wider sectoral applications with policy emphasis on reaching out to rural areas and taking in greater inputs from NGOs and private sector as well. There has been an increasing involvement of international donor agencies such as DfID, G-8, UNDP, WB under the framework of e-governance for development.

While the emphasis has been primarily on automation and computerization, state endeavours to use IT include forays into connectivity, networking, setting up systems for processing information and delivering services. At a micro level, this has ranged from IT automation in individual departments, electronic file handling, access to entitlements, public grievance systems, service delivery for high volume routine transactions such as payment of bills, tax dues to meeting poverty alleviation goals through the promotion of entrepreneurial models and provision of market information. The thrust has varied across initiatives, with some focusing on enabling the citizen-state interface for various government services, and others focusing on bettering livelihoods.

Some E-governance Initiatives	
State/Union Territory	Initiatives covering departmental automation, user charge collection, delivery of policy/programme information and delivery of entitlements
Andhra Pradesh	e-Seva, CARD, VOICE, MPHS, FAST, e-Cops, AP online-One-stop-shop on the Internet, Saukaryam, Online Transaction processing
Bihar	Sales Tax Administration Management Information
Chhattisgarh	Chhattisgarh Infotech Promotion Society, Treasury office, e-linking project
Delhi	Automatic Vehicle Tracking System, Computerization of website of RCS office, Electronic Clearance System, Management Information System for Education etc
Goa	Dharani Project
Gujarat	Mahiti Shakti, request for Government documents online, Form book online, G R book online, census online, tender notice.

Haryana	Nai Disha
Himachal Pradesh	Lok Mitra
Karnataka	Bhoomi, Khajane, Kaveri
Kerala	e-Srinkhala, RDNet, Fast, Reliable, Instant, Efficient Network for the Disbursement of Services (FRIENDS)
Madhya Pradesh	Gyandoot, Gram Sampark, Smart Card in Transport Department, Computerization MP State Agricultural Marketing Board (Mandi Board) etc
Maharashtra	SETU, Online Complaint Management System-Mumbai
Rajasthan	Jan Mitra, RajSWIFT, Lokmitra, RajNIDHI
Tamil Nadu	Rasi Maiyams–Kanchipuram; Application forms related to public utility, tender notices and display
Uttar Pradesh	Lokvani, Treasury Computerization, Bhulekh, Vahan, Telemedicine
North-Eastern States	
Arunachal Pradesh,	Community Information Center. Forms available on
Manipur, Meghalaya,	The Meghalaya website under schemes related to
Mizoram & Nagaland	Social welfare, food civil supplies and consumer affairs, housing transport etc.

3. THE E-GOVERNANCE MARKET

The Economic Times recently reported that the government in India is emerging as the fourth largest vertical spender on information technology after the telecom, manufacturing and banking and finance industries. According to Gartner estimates, the Indian government has spent around 1 billion USD on information technology in 2002. This includes the expenditure of the Central and state governments on hardware, software, telecommunication equipment, telecommunication services, and IT services, but excludes salary costs of IT staff. In fact, the government accounted for 9 per cent of the total IT spend in India for the year 2002, and in five years that is estimated to go up to 15 per cent. Though e-government is still in its infancy, over 20 states/union territories already have an IT policy in place. In terms of basic computerization, police

departments, treasury, land records, irrigation and justice are seen as having the maximum potential.

Nasscom estimates that in the next five years, state governments in India will spend close to Rs. 15,000 crores on computerising their operations. The pressure to be IT-savvy is not only to keep with times, but comes from a more pragmatic dimension; loans to governments from multilaterals have now become more or less contingent upon a proper treasury management system which translates into a computerised system that will tell lending institutions what has happened to the money that it has lent. Currently, India's manual treasury systems don't permit this with the kind of transparency required.

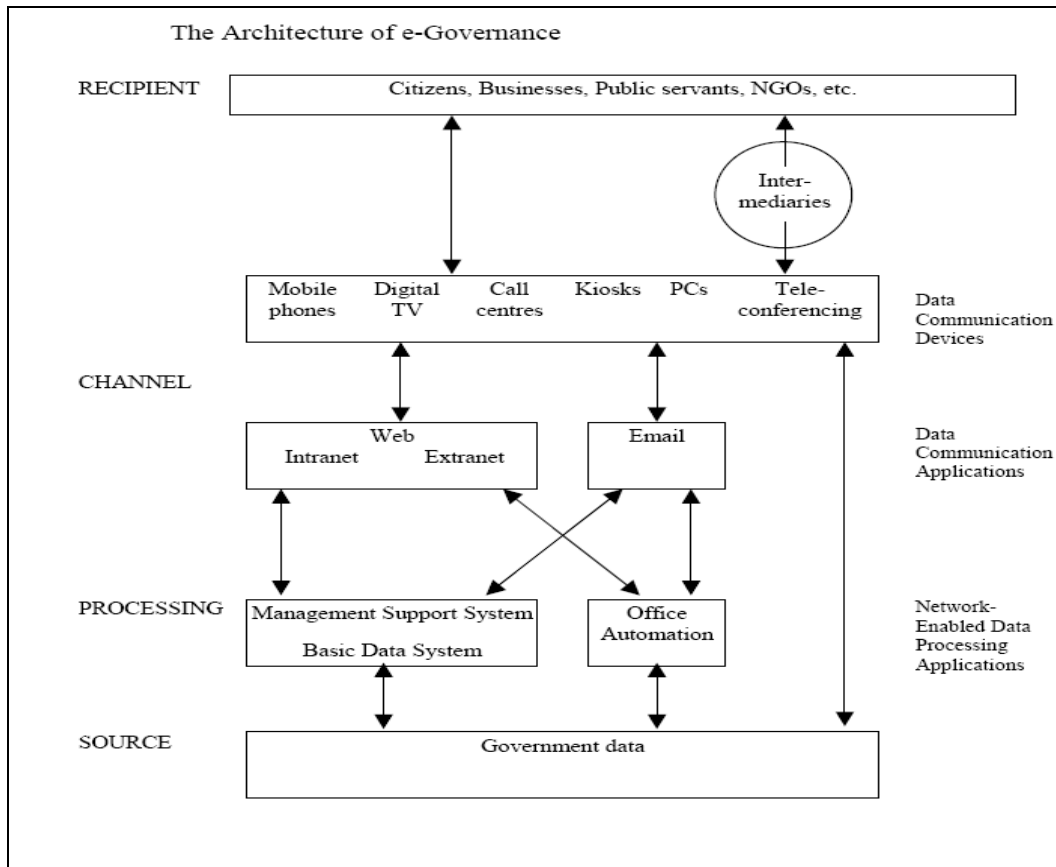
For governments, the more overt motivation to shift from manual processes to IT-enabled processes may be increased efficiency in administration and service delivery, but this shift can be conceived as a worthwhile investment with potential for returns. As is evident in the celebrated case of Saukaryam (Vishakapatnam, AP), computerization and more efficient back-end processes can actually imply revenues for governments. Saukaryam is self-sustaining and does not require government funding. More importantly, the real spin-off is in the enhanced image of the government as being citizen-friendly.

Even as e-governance signifies a business opportunity for industry and a strategy for the government, from a citizen perspective, there exists an overarching concern. Not how much can be spent, but what could be achieved is really the moot point. Setting up MIS may be an important and necessary exercise but very often cost-benefit analysis is not done and public money is used up in avenues that are not meaningful.

A classic example is of buying hardware (like color laser printers) far in excess of requirements or buying computers without a clear training plan for staff. There are larger implications of the absence of visioning. Without a clear vision, huge investments in the name of e-governance may not really contribute to improve the quality of life of citizens despite huge potential.

MIS systems like DACNET of the Ministry of Agriculture have received flak for being no more than tools to control agricultural development activities rather than act as a facilitative platform for informing multiple stakeholders about how agriculture can be developed in India and supporting them in improving productivity and participating in markets, including global

markets. Without clear vision, huge investments in the name of e-gov may not really contribute to improve the quality of life of citizens, despite there being huge potential in this



Source: Sameer Sachdeva (2002), E-Governance Strategy in India

3. ISSUES FOR E-GOVERNANCE

3.1 Funding: Funding is the foremost issue in e-Governance initiatives. The projects that are part of the e-governance initiatives need to be funded either through the Government sector or through the private sector. For the private sector to step into the funding activity their commercial interests needs to be ensured. The projects can be built either on BOO (Built Own Operate) or BOOT (Built Own Operate Transfer) basis. Also the Government interest of Value Addition in services also needs to be taken care of while transferring the services to private sector. Advertising, sharing of Government information etc could be a few revenue generators for the Government.

3.2 Management of Change: The delivery of Government services through the electronic media including EDI, Internet and other IT based technologies would necessitate procedural and legal

changes in the decision and delivery making processes. It demands fundamental changes in Government decision management. The employees need to be delegated more authority. De-layering of the decision-making levels leads to re-engineering and appropriate sizing of the decision-making machinery. These changes need not only be accepted by the Government and citizens but also be accepted by various interests groups like Employees unions. Under such circumstances bringing in a change will involve changing the mindsets of the people, and a complete Reengineering process needs to be carried out for the same. This will involve training of the personnel at all levels, more so, at the lower rung of Government management organizations. There will also be a loss of vested interests and power amongst the legislature and the executive, which may lead, to resistance to change.

3.3 Privacy: The privacy of the citizen also needs to be ensured while addressing the issues. Whenever a citizen gets into any transaction with a Government agency, he shells out lot of personal information, which can be misused by the private sector. Thus, the citizen should be ensured that the information flow would pass through reliable channels and seamless network.

3.4 Authentication: Secured ways of transactions for the Government services are another issue of concern. The identity of citizens requesting services needs to be verified before they access or use the services. Here digital signature will play an important role in delivery of such services. But the infrastructure needed to support them is very expensive and requires constant maintenance. Hence a pertinent need still survives, compelling the authorities to ensure the authenticity in their transactions thereby gaining absolute trust and confidence of the citizen.

3.5 Interoperability: A major design issue for integrated service delivery sites is, how to capture data in a Web-based form and transfer it to an agency's systems for processing and sharing that information in a common format. Infact the interoperation of various state Governments, the various ministries within a state Government is a critical issue. Further how the various islands of automation will be brought together and built into one is another key issue of e-Governance.

3.6 Delivery of services: The ability of citizens to access these services is another major issue. Since the penetration of PCs and Internet is very low in the country, some framework needs to be worked out for delivery of the e-Services that would be accessible to the poorest of the poor. What will be the Government's network to deliver those services? Could we have something like a single stop shop of the Government? A proposed mechanism is delivery of the same through

the Government Post Offices, for they already have the brick and mortar support and the most extensive network in the nation.

3.7 Standardization: Defining the standards for the various Government services is another issue that needs to be addressed. The standards need to be worked out not only for the technologies involved but also for issues like naming of websites to creating E-Mail addresses.

3.8 Technology Issues: A number of organizations, both in the Centre and the States, have taken commendable initiatives to develop hardware and software platforms to address the challenges offered by e-Governance. At the central level in particular, the C-DAC, CMC and a number of others are noteworthy. The e-Governance initiative would have to address these Technology Issues/Objectives by identifying the appropriate hardware platforms and software application packages for cost-effective delivery of public services. This knowledge repository should be widely available through appropriate Demo- Mechanisms. Offering a basket of these models to the State departments, both in the Center and the State, could be suitably customized as per location and work specific requirements.

3.9 Use of local languages: The access of information must be permitted in the language most comfortable to the public user, generally the local language. There do already exist technologies such as GIST and language software by which transliteration from English into other languages can be made.

4. Challenges for E-Government in India:

The governments both –the Union and the states must make earnest efforts to complete the daunting, but formidable task of quicker and effective E-government programs by:

- Making a policy choice in favour of computerization to overcome radically the even if it requires huge investments for the purchase of hardware and software.
- Serious efforts would be required to mobilize resources for this arduous job. One way to deal with the situation could be that governments enter into arrangements for leasing of computers. This would reduce initial heavy capital investments. There are a large number of agencies which would like to fund the leasing to the departments. Ministry of Finance can be asked to provide concessions to these agencies.

- Establishing complete connectivity between various ministries and departments so that transfer of files and papers could be done through Internet thereby choosing efficacious speed as an alternative to manual labour. To make this really effective, there is a need to make databases of various departments compatible with one another. Thus, interoperability of e- governance projects is of vital importance if the citizens are to feel the benefit of IT in day to day life.
- Supplying information to the public in a language that they understand and are comfortable with, and generally, it is the local language. As, technology is available by which transliteration from English into other languages can be made. Therefore, the problem is manageable provided there is enough motivation to do this onerous task.
- Changing the mindset of the government employees who are used to working only in the manual mode. This is a big task and needs patience and careful planning. Workshops, seminars, and training programmes are required to be organized to spread awareness among the employees at all levels.
- Making cyber laws available to the public as early as possible so that the IT systems and information documents stored in the systems has the same legal validity as the documents stored today on paper.
- Build supporting infrastructures of power and all weather surface transport system to bridge the digital divide between the rural and urban India Last of all the Government must address on urgent basis: the two major concerns in the IT implementation- the security and privacy. Steps must be initiated to generate confidence among the individuals and organizations to conduct on-line transactions and communications.

Conclusion

The objectives of achieving e-governance and transforming India go far beyond mere computerization of standalone back office operations. It means, to fundamentally change as to how the government operates, and this implies a new set of responsibilities for the executive and politicians. It will require basic change in work culture and goal orientation, and simultaneous change in the existing processes. Foremost of them is to create a culture of maintaining, processing and retrieving the information through an electronic system and use that information

for decision making. It will require skilled navigation to ensure a smooth transition from old processes and manual operations to new automated services without hampering the existing services. This can be achieved by initially moving ahead in smaller informed initiatives in a time bound manner and avoiding large and expensive steps without understanding the full social implications. Every small step thus taken should be used to learn about hurdles and improve upon the next steps, both in terms of direction and magnitude. The proposed changes are likely to be met with a lot of inertia which cannot be overcome by lower and middle level officials with half hearted attempts to diffuse the technology. The change in the mindset to develop and accept the distributed and flat structured e-governance system is required at the top level system to beat the inertia.

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