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Authors can submit their contributions for possible publication in ETHOS.

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From the Desk of Editor

It is a moment of pride to place before you the first issue of ninth volume of Ethos. This issue is published on the articles which are received for the 2nd International conference Alive. I feel satisfied today on keeping a promise that articles which are selected in 'A' grade for conference are placed in Ethos.

The journal has completed its nine years of publishing research articles in management and allied areas. The entire exercise of Ethos and experience arouse towards need of providing scientific training to upcoming researcher's via-a-vis refreshing the research guides.

Present volume envelops eight articles only. The added sections for case study and book review were proposed but this Ethos promise to carry conference articles only.

Prakash Kambale coins valuables reasons of labour migration from rural areas to urban areas. Migration of labour can pose some problems like nature and extent of employment, physical or intellectual work, rates of wages, levels of income, provision of basic necessities of life, number of working hours, disposal of income, social security services, social services like education, health and medical, social status, political power etc.

A. M. Gurav discussed Activity-Based Costing (ABC) which is useful for sustainable development of the industries. Buying Behaviour of Students in Two Wheelers a paper by R.R. Chavan gives valuable inputs to two wheeler automobile industries. Ganesh Pathak discussed the opinion of medical practitioners about reasons for prescribing product of specific company as well as Services and Facilities received by medical practitioners.

I hope that the articles contributed by research scholars and academicians would be immensely readable and beneficial to stakeholders. I look forward to your valuable feedback to enable us enthrall readers and ensure continuous improvement.

DR. B.S. SAWANT
Editor-in-Chief

An Appraisal of Rural Youth's Behaviour towards Organized Retail

Vilas S. Balgaonkar

Abstract:

Retailing is one of the largest sectors in the global economy and is going through an evolutionary stage in India. Retail is currently a flourishing sector of the Indian economy. The Indian Retail industry has grown at a Fifteen percent. The organized retailing in India has grown at a CAGR of more than twenty six percent; higher than the total growth of Indian retailing. The sector is the largest source of employment after agriculture, and has deep access into rural India generating more than ten per cent of India GDP. Retail is currently the flourishing sector of the Indian economy. This trend is expected to continue for at least the next two-three decades, and it is attracting huge attention from all entrepreneurs, business heads, investors as well as real estate owners and builders. Availability of quality, retail space, wider availability of products and brand communication are some of the factors that are driving the retail in India. Retail sector is also supporting to create huge employment while a new form of organized retail sector has emerged within the retail industry and it gave speedy phase to Indian retail sector. At the same time India had a total youth population is more than thirty five percent of the total population. Out of this population, about seventy per cent were rural youth and the remaining thirty per cent were urban youth. As, majority of the youth comes from rural areas, they are considered as the nation builders of tomorrow. This important section of the rural population can respond to the needs of country only if they are offered fruitful opportunities for growing up as useful citizens. This is one of the reasons to attract rural youth towards urbanization. Due to this kind of growth in organized retail sector youth from rural area enjoying the organized retail in terms of shopping as well as other benefits like jobs. So this study identified the rural youth's behavior towards organized retail and it also analyzed various factor which affecting on their behavior.

Keywords : Organized Retail, Youth Behavior, Rural etc.

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Objectives:

1. Determine the socio-economic characteristics of rural youths in the study areas.
2. To assess the attitude of rural youths toward organized retailing
3. To examine the factors influencing rural youths attitude toward organized retailing
4. To examine the relationship between rural youths attitude towards retail and level of involvement in retail activities.

Introduction:

India started its Retail Journey since ancient time. In Ancient India there was a concept of weekly HAAT, where all the buyers and sellers gather in a big market for bartering. It takes a pretty long So the Indian retail industry is divided into two sectors-organized and unorganized. The Indian retail industry is now beginning to evolve transformation that has swept other large economies. There is a vast change in Indian retail, the liberalization of the consumer goods industry initiated in the mid-1980's and accelerated through the 1990s has begun to impact the structure and conduct of the retail industry. The concept retail, which includes the shopkeeper to customer interaction, has taken many forms and dimensions, from the traditional retail outlet and street local market shops to upscale multi brand outlets, especially stores or departmental stores. Hence, focusing on two aspects of retail marketing, i.e., store retailing and non-store retailing. Store Retailing as the departmental store, which is a store or multi brand outlet, offering an array of products in various categories under one roof, trying to cater to not one or two but many segments of the society and Non store retailing as the direct selling, direct marketing, automatic vending. The most important debate The most important debate concerning the implications for the expansion of the organized retailing in India revolves around whether it is going to have positive impacts on the economy as a whole as compared to the traditional unorganized form of retailing. According to one camp, it has overall positive impacts in terms of generating more number of employments, new diversified forms of employments, and improving the nature of retail employment (higher salary, more job benefits, security of job, employability, etc.). The organized retail food and grocery stores make constant efforts to induce customers to visit the store by discount offers. Most of these stores believe in creating not just a marketing activity with its customers, but rather favor relationship building with him so as to convert first time customers into a client. They provide better parking facilities to customers and the facility to

examine the product. They also offer a wide range of payment options to customers. India is currently the twelfth largest consumer market in the world. According to a study by McKinsey Global Institute, India is likely to join the premier league of the world's consumer markets by 2025 improving its position to the fifth. But this growth is not going to happen in smooth way. Any change always comes up with some friction and Indian retail sector is and will be witnessing the same friction. Indian retail sector is still in its nascent form if we consider its full potential

Review of Literature:

Purohit and Kavita according to their studies that the traditional retailers are not very much clear about the consequences of the modern retailing the traditional retailers are neutral or undecided, modern retailing will cut the profit margin of the traditional retailers; the modern retailing will lead healthy competition in the market, modern retailing will reduce the sales volume of the traditional retailers and traditional retailers should improve customer care services in the era of modern retailing.

Shaoni Shabnam: It is important to highlight that in organized retail, the status of employment is much better than that in unorganized retail. Hence it is definitely desirable that more and more labor gets absorbed in this sector of retail. In the current context, the labor employed in unorganized retail stands unfit for finding employment in organized retail. If appropriate training and skills could be imparted to them, it is possibly feasible to offer better forms of employment to them in the organized retail sector. The status of employment is much better than that in unorganized retail. Hence it is definitely desirable that more and more labor gets absorbed in this sector of retail. In the current context, the labor employed in unorganized retail stands unfit for finding employment in organized retail. If appropriate training and skills could be imparted to them, it is possibly feasible to offer better forms of employment.

Meeta Punjabi: According to their study they suggest that the development efforts in this area

are based on three grounds: First, farmers associated with the modern value chains earn higher returns than selling to the traditional markets. Second, the modern supply chains have specific quality requirements which are easier to meet by the large and medium farmers and the small farmers tend to get left out of these markets. Third, there are several successful examples of linking small farmers to these modern value chains with effort from government agencies, NGOs and development agencies. This knowledge presents strong grounds for a closer look at the emerging sector in India.

Mathew Joseph: Unorganized retailers in the vicinity of organized retailers experienced a decline in their volume of business and profit in the initial years after the entry of large organized retailers. The adverse impact on sales and profit weakens over time. There was no evidence of a decline in overall employment in the unorganized sector as a result of the entry of organized retailers. There is some decline in employment in the North and West regions which, however, also weakens over time. The rate of closure of unorganized retail shops in gross terms is found to be 4.2% per annum which is much lower than the international rate of closure of small businesses.

Srivastava (2008) - The findings presented show that malls in 2006 are more developed in the North and West part of India. Food, groceries and apparel purchase by customers contributed to 52 percent. On an average 75 percent of customers spend about 1-3 hours in the mall. Malls with multiplexes such as cinema theatres, food courts, and play places for children are becoming the center for family outings. Small retailers have improved their service to cater to Indian consumers. Credit limits and home service are helping them to hold on to their customers. Retailing focus is changing towards satisfying the different hierarchy of needs of customers.

Ernst & Young's report- 'The New Market Shehers: Tapping Potential beyond the Metros' (2010) - throws light on the growing clout of the key urban towns in India. The key findings of the report indicate

retail presence in the Key Urban Towns (KUTs) and the Rest Of Urban India (ROUI) through organized retail chains and malls has increased considerably over a two-year period; the percentage growth in the number of malls in the KUT (55%) was more than twice that of the metros (24%) .

Methodology

The study was conducted in Solapur district, Maharashtra State. Solapur was purposively chosen for the study because it is surrounded by many rural communities which are mainly familiar of organized retail sector. The present study identified different merchandising techniques cues that could possibly influence the purchase decision of in such a scenario. A multiple cross sectional descriptive type of research was designed for the study. The study identified the perception of three different groups of youths. The respondent fell in age group between 18-35 years. Convenient sampling was used as the sampling technique and a total of 100 responses were collected. Primary data was used in the study, and a survey method of data collection technique was undertaken. The period of study was during May-June 2015. A structured pre-tested questionnaire was used as the data collection instrument. Pretesting of the questionnaire was done among small group of rural youth. Various dimensions were determined by presenting before the respondents an inventory of 20 different views of rural youth towards organized retail. Opinions were designed by referring to the literature and prepared 20 statements reflecting attitude of rural youth towards organized retail. The respondents are requested to rank the statements on a 5-point Likert scale basis (5= strongly disagree & 1 = strongly agree) factor analysis technique was used to analyze the primary data. Also the antecedents to the rural youth's attitude outcomes at organized retail were verified by a multiple regression analysis. It is hypothesized in this study various attributes of an organized retail shop influence rural youth's attitude outcomes. Obtained data through the questionnaire were analyzed using SPSS (20) software package in 95 % confidence interval.

Analysis and Discussion:

Factor Analysis

Primary data was collected through a structured questionnaire. The respondents were asked to answer based on giving a rank to each statement on a 5-point Likert scale basis (5= strongly disagree & 1 = strongly agree) factor analysis technique was used to analyze the primary data. The respondents were consumer in Solapur.

Exploratory study was done to determine the consumer behavior towards organized retailing

The respondents are requested to rank the statements on a 5-point Likert scale basis (5= strongly disagree & 1 = strongly agree) Trimming a large number of variables to reach at few factors to explain the original data more economically and efficiently factors analysis, a widely used multivariate technique in research. It is important tool for resolving this confusion and identifying factors from an array of seemingly important variables.

Adequacy of the data is tested on the basis of results the Kaiser-Meyer-Olkin (KMO) measures

of sampling adequacy and Bartlett's test of sphericity (homogeneity of variance) provided. The KMO measure of sampling adequacy is 0.799 (shown in Table-) which indicates the present data suitable for factor analysis.

Bartlett's Test of Sphericity tests the hypothesis whether the population correlation matrix is an identity matrix. The existence of the identity matrix puts the correctness of the factor analysis under suspicion. Table 1 shows that chi square statistic is 3725.533 with 190 degree of freedom. This value is significant at 0.01 levels. The results, KMO statistic and Bartlett's Test of Sphericity indicate an appropriate factor analysis model.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.799
Bartlett's Test of Sphericity	Approx. Chi-Square	3725.533
	Df	190
	Sig.	.000

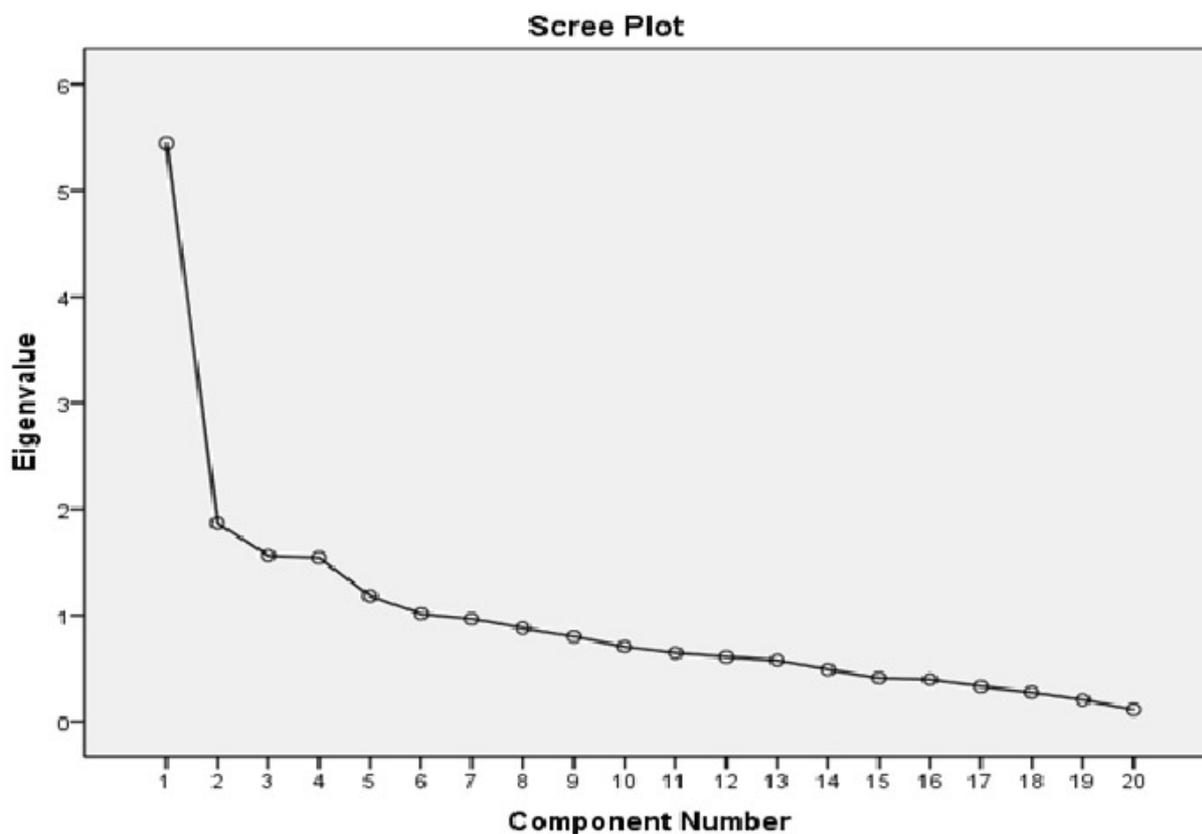


Table 2: Correlation

Correlation	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
	1.000	.577	.268	.428	.329	.119	.413	.195	.227	.187
Expensive	.577	1.000	.158	.305	.349	.050	.351	.137	.179	.129
Save Money	.268	.158	1.000	.283	.135	.177	.222	.214	.103	.219
Variety	.428	.305	.283	1.000	.497	.309	.331	.287	.329	.234
Class	.329	.349	.135	.497	1.000	.203	.388	.069	.308	.167
Discounts/Offers	.119	.050	.177	.309	.203	1.000	.376	.169	.184	.203
Pick N Choice	.413	.351	.222	.331	.388	.376	1.000	.264	.333	.192
Trust	.195	.137	.214	.287	.069	.169	.264	1.000	.219	.317
Family Shopping	.227	.179	.103	.329	.308	.184	.333	.219	1.000	.231
Impulsive	.187	.129	.219	.234	.167	.203	.192	.317	.231	1.000
Shopping	.266	.230	.174	.250	.296	.174	.402	.081	.264	.245
Social Recognition	.308	.231	.149	.239	.249	.230	.423	.078	.200	.167
Weighted	.319	.296	.138	.270	.244	.234	.462	.115	.203	.165
Status	.278	.269	.077	.230	.204	.145	.266	.079	.182	.141
Lifestyle	.165	.142	.215	.109	.053	.125	.062	.216	.109	.159
Scope	.128	.059	.096	.059	.041	.001	.088	.034	.140	.004
Available Under One Roof	-.097	-.100	-.120	-.046	-.131	.015	-.067	-.126	-.105	-.109
Parking Facility	.836	.542	.251	.464	.540	.127	.405	.244	.252	.270
Spending Time	.211	.138	.130	.123	.168	.019	.177	.055	.207	.014
Quality	.709	.385	.151	.260	.172	.100	.377	.157	.097	.146

	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20
Expensive	.266	.308	.319	.278	.165	.128	-.097	.836	.211	.709
Save money	.230	.231	.296	.269	.142	.059	-.100	.542	.138	.385
Variety	.174	.149	.138	.077	.215	.096	-.120	.251	.130	.151
Class	.250	.239	.270	.230	.109	.059	-.046	.464	.123	.260
Discounts/Offers	.296	.249	.244	.204	.053	.041	-.131	.540	.168	.172
Pick n choice	.174	.230	.234	.145	.125	.001	.015	.127	.019	.100
Trust	.402	.423	.462	.266	.062	.088	-.067	.405	.177	.377
family shopping	.081	.078	.115	.079	.216	.034	-.126	.244	.055	.157
Impulsive	.264	.200	.203	.182	.109	.140	-.105	.252	.207	.097
Shopping	.245	.167	.165	.141	.159	.004	-.109	.270	.014	.146
social recognition	1.000	.554	.498	.273	.069	.029	-.041	.297	.100	.280
Weighted	.554	1.000	.628	.417	.021	-.009	.027	.280	.064	.327
Status	.498	.628	1.000	.492	.155	.019	.060	.271	.061	.369
Lifestyle	.273	.417	.492	1.000	.271	-.022	.052	.240	.014	.203

	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20
Scope	.069	.021	.155	.271	1.000	.031	-.143	.178	.054	.101
available under one roof	.029	-.009	.019	-.022	.031	1.000	-.053	.113	.723	.058
Parking facility	-.041	.027	.060	.052	-.143	-.053	1.000	-.170	-.028	-.026
Spending time	.297	.280	.271	.240	.178	.113	-.170	1.000	.206	.668
Quality	.100	.064	.061	.014	.054	.723	-.028	.206	1.000	.029
Branded range	.280	.327	.369	.203	.101	.058	-.026	.668	.029	1.000

This is goodness of fit coefficient whose value varies between 0 and 1 and we take values over 0.5 to represent a good factor analysis. Similarly, Bartlett's test of sphericity is significant ($p < 0.001$) that explains existence of sufficient correlation between the variables to proceed with the analysis. The test distributed and it may be accepted when it is significant at $p < 0.05$. All the extracted communities are acceptable and all variables are fit for the factor solution as their extraction values are large.

Table 3: Communalities

Variables	Initial	Extraction	Variables	Initial	Extraction
Expensive	1.000	.859	Save money	1.000	.542
Variety	1.000	.387	Class	1.000	.558
Discounts/Offers	1.000	.697	Pick n choice	1.000	.529
Trust	1.000	.554	family shopping	1.000	.524
Impulsive	1.000	.486	Shopping	1.000	.402
social recognition	1.000	.532	Weighted	1.000	.685
Status	1.000	.730	Lifestyle	1.000	.578
Scope	1.000	.669	available under	1.000	.849
Parking facility	1.000	.554	one roof		
Spending time	1.000	.860	Quality	1.000	.859
Branded range	1.000	.755			

Extraction Method: Principal Component Analysis.

Table 4 :Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2	3	4	5	6	7	8	9	10
1	5.446	27.230	27.230	5.446	27.230	27.230	3.018	15.090	15.090
2	1.868	9.339	36.569	1.868	9.339	36.569	2.756	13.778	28.869
3	1.561	7.804	44.373	1.561	7.804	44.373	1.999	9.996	38.864
4	1.541	7.706	52.080	1.541	7.706	52.080	1.885	9.423	48.288
5	1.182	5.909	57.989	1.182	5.909	57.989	1.775	8.873	57.161
6	1.013	5.066	63.055	1.013	5.066	63.055	1.179	5.894	63.055
7	.965	4.826	67.881						

1	2	3	4	5	6	7	8	9	10
8	.880	4.398	72.279						
9	.801	4.006	76.285						
10	.704	3.519	79.804						
11	.645	3.224	83.028						
12	.607	3.037	86.064						
13	.575	2.876	88.940						
14	.489	2.444	91.384						
15	.409	2.047	93.431						
16	.394	1.972	95.404						
17	.330	1.650	97.054						
18	.275	1.373	98.427						
19	.204	1.018	99.446						
20	.111	.554	100.00						
Extraction Method: Principal Component Analysis.									
a.6 components extracted.									

Table 5 : Component Matrix

Variables	Component					
	1	2	3	4	5	6
Expensive	.764	.202	-.402	-.231	.064	.123
Save money	.605	.111	-.312	-.205	.012	-.156
Variety	.385	.172	.007	.332	.210	.236
Class	.623	.085	-.016	.223	-.327	.073
Discounts/Offers	.581	.085	.003	.019	-.507	-.307
Pick n choice	.368	-.175	.283	.359	-.184	.346
Trust	.687	-.094	.180	.006	-.158	.129
family shopping	.358	.139	-.045	.542	.146	.244
Impulsive	.459	.127	.298	.222	-.247	-.245
Shopping	.395	-.014	.028	.486	.057	.077
social recognition	.577	-.304	.282	-.100	-.021	-.130
Weighted	.595	-.450	.281	-.213	.066	-.019
Status	.627	-.439	.257	-.188	.204	-.029
Lifestyle	.488	-.362	.130	-.087	.342	-.261
Scope	.269	.066	-.061	.368	.625	-.249
available under one roof	.161	.691	.485	-.265	.185	.073
Parking facility	-.137	-.279	.179	-.312	-.012	.572
Spending time	.785	.242	-.405	-.123	-.077	.010
Quality	.264	.678	.498	-.268	.102	.019
Branded range	.631	-.006	-.415	-.298	.139	.274
Extraction Method: Principal Component Analysis.						
a. 6 components extracted.						

Table 6 : Rotated Component Matrix

Variables	Component					
	1	2	3	4	5	6
Expensive	.178	.172	.172	.722	.113	.034
Save money	.248	.202	-.009	.612	.040	.186
Variety	.191	.053	.268	-.010	.139	.777
Class	.326	.819	.385	.132	.008	-.080
Discounts/Offers	.297	.160	.003	.361	.014	.860
Pick n choice	-.781	.233	.348	.260	-.038	-.315
Trust	.296	.436	.804	.373	.104	-.188
family shopping	.123	-.032	.702	.054	.006	.108
Impulsive	-.015	.213	.220	.280	.791	.138
Shopping	.056	.125	.372	.183	-.669	.132
social recognition .039	.122 -.029			.653	.080	.287
Weighted	.166	.784	.057	.144	-.005	-.139
Status	.198	.820	.110	.055	.014	-.051
Lifestyle	.143	.398	.551	-.016	-.039	.258
Scope	.071	.214	.397	-.220	.951	.040
available under one roof	.049	-.022	.028	.010	.019	.607
Parking facility	-.657	.149	-.040	-.324	.010	-.150
Spending time	.838	.110	.185	.309	.074	.100
Quality	.091	.032	.023	.137	.911	.011
Branded range	.212	.234	.135	-.087	-.017	.818
Extraction Method: Principal Component Analysis.						
Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 20 iterations.						

Table 7: Component Transformation Matrix

Component	1	2	3	4	5	6
1	.613	.539	.386	.402	.139	.060
2	.213	-.605	.084	.126	.720	.216
3	-.646	.425	.081	.171	.570	-.203
4	-.368	-.232	.765	.195	-.302	.310
5	.042	.290	.201	-.785	.205	.464
6	.155	-.159	.460	-.372	.064	-.772
Extraction Method: Principal Component Analysis.						
Rotation Method: Varimax with Kaiser Normalization.						

The respondents were asked to rate their agreement level on a 5-point Likert scale, ranging from strongly disagree to strongly agree. These data were analyzed through principal component analysis

The data was divided into six heads: personal, social, cultural, economical, psychological and motivational related behavioral factor. Factor analysis was done for these six heads to identify the factors that explain the pattern of correlation within a set of observed variables. The alpha coefficient of reliability value was 0.799. This indicates that the scale is highly reliable. The result of factor analysis is presented below.

Amongst the 20 items 6 components has been extracted. The first components consist of three factors (pick n choice, spending time and parking facility) which are related to personal factor. Second components comprises of four factors (class, social recognition, weightage and status) which are related to social factors, similarly third components consist of three factors (trust, family shopping and lifestyle) related to cultural factor these three components are contributed about 44.373 variations independently.

The fourth components consist of two factors (expensive and save money) which are related to

economical factor. Fifth components comprises of four factors (impulsive, shopping, scope and quality) which are related to psychological issues, similarly sixth components consist of four factors (variety, discounts/offers, available under one roof and branded range) related to motivational factors these three components are contributed about 63.055 variations independently.

Regression

Organized Retail Shop = Regression analysis

The antecedents to the rural youth's behavior outcomes at organized shops were verified by a multiple regression analysis. It is hypothesized in this study that ambience, discounts/offers, social status, attractive display, Lifestyle, and variety of brands attributes of an organized retail shop influence rural youth's behavior outcomes.

Ho: Rural youth's behavior outcomes are not dependent upon ambience, discounts/offers, social status, attractive display, Lifestyle, and variety of brands attributes of an organized retail shop.

Ha1: Rural youth's behavior outcomes are dependent upon ambience, discounts/offers, social status, attractive display, Lifestyle, and variety of brands attributes of an organized retail shop.

Table: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.131a	.017	.005	1.237
a. Predictors: (Constant), ambience, discounts/offers, social status, attractive display, Lifestyle, and variety of brands.				
b. Dependent Variable: Rural youth's behavior outcomes				

Table: Regression Output

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	13.149	6	2.191	1.432	.000
Residual	754.249	493	1.530		
Total	767.398	499			

Since p value is less than 0.05 reject null hypotheses and accept alternative hypothesis. This indicates that rural youth's behavior outcomes are dependent upon ambience, discounts/offers, social status, attractive display, Lifestyle, and variety of brands attributes of an organized retail shop.

Table: Residuals Statisticsa

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.86	2.98	2.80	.162	500
Residual	-1.976	2.272	.000	1.229	500
Std. Predicted Value	-5.798	1.069	.000	1.000	500
Std. Residual	-1.597	1.837	.000	.994	500
a. Dependent Variable: Rural youth's behavior					

Table: Coefficientsab

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	3.823	.579		6.602	.000	2.685	4.961
Ambience	-.146	.112	-.058	-1.295	.041	-.367	.075
Discounts/Offers	.022	.074	.016	.296	.050	-.123	.167
Social Status	-.105	.178	-.031	-.590	.555	-.455	.245
Attractive Display	-.736	.319	-.105	-2.308	.021	-1.363	-.109
Lifestyle	-.023	.115	-.009	-.196	.045	-.248	.203
Variety of Brands	.018	.063	.013	.281	.779	-.106	.141
a. Dependent Variable: Rural youth's behavior							
b. ambience, discounts/offers, social status, attractive display, Lifestyle, and variety of brands							

The multiple regression analysis indicates that the p values for each of the independent variables like social status and variety of brands are greater than 0.05 means rural youth's attitude is not dependent on these variables. Whereas rural youth's behavior is dependent on ambience, discount /offers, attractive display and lifestyle.

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Buying Behaviour of Students in Two Wheelers

Rajashri Ramesh Chavan, Aniket Changan

Abstract:

India is the second largest producer of two wheelers vehicle in the world. It believes that majority of Indians especially youngsters prefer these as most convenient means of transport. The objective of two wheeler industry is to sustain market share through satisfying customer needs and expectations. The manufacturers therefore, have to understand the real needs, wants, belief and attitude of customer towards the product. Therefore the aim of this paper to understand the preference of brand and buying pattern of youngsters especially college going students. Field survey was conducted during the month of Sept to December and students responses collected from different campus of traditional education(BA,B.Com) colleges, Managerial and Technical institutions. Responses obtained from 131 students consists both gender as male and female. Collected data analyzed with percentage and mean, standard deviation. Results reveals that large number of respondents belongs to the 21-25 age group and the percentage of male respondents are more compared to female. Hero and Honda are more preferred brand among the students, quality and reliability are reasons fore preference of a particular brand, acceptable price range lies in between Rs. 50000-70000, Friends are the most reliable source preferred by the students, 80.92% made the cash payment in purchasing the two-wheeler. Colour, Pickup, mileage, maintenance, look and engine are highly considered by students in selection of vehicle. In vehicle preference, mileage and average factors are highly influences the students whereas popularity, social status and brand loyalty are highly influences for brand preference among the students. Students showed their interest in Hero and Honda brand to purchase in future. It proved that there is no significant relationship between educational background and brand preference in two wheeler and also there is no significant relationship between educational background and buying pattern (Rationality, price range preferred, Information source, Source of finance, Process adopted to purchase). However, one factor of buying pattern i.e. from where to purchase the p value is 0.005 where the data is adequate to reject null hypotheses i.e. There is no significant relationship between educational background and from where to purchase. Therefore an alternative hypothesis is accepted that there is significant relationship between educational background and from where to purchase (buying pattern). Obtained results would provide the guidelines to distributors of two wheelers to determine effective marketing strategy to catch Satara Two Wheeler Market.

Keywords: Two wheelers, Brand Preference, Influencing Factors,

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Introduction :

Indian Two-Wheeler Market is noticing a continuous rise in demand and thus resulting in growing production and sales volume. This owes a lot to the launching of new attractive models at affordable prices, design innovations made from youths' perspective and latest technology utilized in manufacturing of vehicles. It results sales volumes in the two-wheeler sector shot up from

15 percent to 24 percent between 2008-09 and 2013-14. Two Wheelers sales registered growth of 8.09 percent in April-March 2015 over April-March 2014. Within the Two Wheelers segment, Scooters, Motorcycles and Mopeds grew by 25.06 percent, 2.50 percent and 4.51 percent respectively in April-March 2015 over April-March 2014. In April-March 2015, overall automobile exports grew by 14.89 percent over the same period last year. Two Wheelers grew 17.93 percent respectively during April-March 2015 over the same period last year. The growth force is also propelled by the fact that the two-wheeler manufacturers in India have understood the market's needs and have been able to deliver as expected.

However, further growth in India Two-Wheeler Industry will depend heavily on consumer buying behaviour especially young generation, which is large population in India. Consumer behaviour is that behaviour exhibited by people in preferring of brand, rationality to select a particular vehicle, their buying pattern, affordability, factors considered in selection of vehicle, factors influences to do the vehicale preference and future purchase. It acts of individuals directly involved in obtaining and including the decision processes that precede and determine these acts. Therefore there is need to understand and evaluate the existing buying behaviour of young generation in two wheelers. To know more about this researcher has gone through the previous research and had taken few reviews which is as follows

Review of Literature:

Study conducted in the twin cities i.e. Hyderabad and Secunderabad and find out that most of the respondents are below 30 years of age and chosen for Yamaha bikes, whereas 40 chosen for Hero Honda, but whereas in the age group of 30-50, 45 respondents chosen for Hero Honda, for Yamaha it is only 30 respondents and respondents above 50 years of age have preferred Yamaha bikes. 35 respondents purchase the Hero Honda Bike due to acceptance of design/style/model, whereas 45

respondents do so for Yamaha and only 20 respondents opted for TVS Bike following acceptance of the bikes design, etc. followed by Hero Honda and TVS. It shows that the sales of Yamaha motor bike are more by way of its design/style/model. As far as mileage per litre of petrol is concerned, Hero Honda is ruling the market and finding favour with the consumers. Yamaha and TVS are far below the expectations of the consumers based on mileage per litre of petrol. 60% of the purchasers of Hero Honda are the students, while 40% of the purchasers of TVS are the employees. It believes Hero Honda bike is more popular with the students, TVS is more popular with the employees. Whereas Businessmen are opting for Yamaha as the above data shows 45% of the purchasers of Yamaha are the Businessmen (Reddy)

Most of young crowd wants the bike which looks sportier, having decent mileage and which is available at decent price. At the same time girls preferred non-g geared bikes like scooty and activa as they were easy to ride and were available in bright and vibrant shades of colours, while employed young professionals were more inclined towards the bikes which were good in terms of aesthetics at the same time having good mileage were the bikes that they preferred. (Keshav Y. Shinde, 2014)

(Singh, 2011) The study carried out at Punjab to differentiate the buying behaviour of rural households from that of urban households. Results shows that there were no significant differences could be observed between rural and urban consumers in terms of their; timing of purchase, buying the same brand of other durable, number of items, and duration of planning before buying. Except in case of buying of an automobile on festive / special occasion, where the income had no relation with habitat. The habitat also reveals association with income in terms of planning for months before buying an automobile. No association has been observed between habitat and income in case of planning for few days, few weeks and years before buying an automobile.

Study emphasis on the growth and status of two wheeler industry in India. Study executed the survey had taken response of customers (actual & potential two wheeler buyers) in the questionnaire. The analysis of data was done using chi-square test. It believes that present study will positively contribute to two wheeler industry to understand the attributes of the product that customer expect from the company. (Shaikh, 2012)

Study conducted at Chennai city of Tamilnadu. It brings out the general attitude of the Consumers towards their purchase decisions and behavior. It was found that most respondents do not take a final decision to purchase a particular brand, before considering two or more brands. The decision to buy a particular brand was mostly influenced by parents and friends. The television plays an important role in influencing them to buy the product. The Indian consumers' brand preference for two-wheeler bikes is based on mileage, price and maintenance cost and road conditions. (Yasmeen, 2015)

Paper aims to identify the attributes and analyze the factors involved in the purchase decision of two-wheelers. An empirical study was conducted with the reference to a very successful brand of two-wheelers with 184 respondents in Vellore district, India. Factor analysis was applied to extract the commonality in the items. Four factors emerged which were named as affordability, comfort, customer care and external influence. Affordability and comfort greatly contributed to the purchase decision. (Poornima, 2011)

(S.Saravanan, 2009) Study reveals that users differ in consumer behaviour towards showroom services of two wheelers on the basis of satisfied random sampling. It describe the consumer satisfaction of two wheelers with respect to socio-economic characteristics as age, gender, occupation, family income, educational level. The data were treated statistically using t-test, F-test and correlation. The result shows that students and employees are more satisfied about show room services. Demographic variables such as marital status, size of the family give significant effect related to show room services.

Study highlights the consumer behaviour , at the time of purchase of second hand car customer not only include price factor but they take care of other factors also like fuel efficiency , look, condition, model also . This study highlights the consumer decision making process. (Nikhil Monga, 2011)

The purpose of this study is to ascertain the key factors influencing the women respondents brand preference in selection of their scooter. The result of Exploratory Factor Analysis revealed five factors namely Comfort, Efficiency, Affordability, Familiarity and Quality of Service as the determinants of preference (Padmasani, 2014)

Survey undertaken among the customers of Hero and the Hero Honda to study their preference of brand after the split. Customer opinions are recorded about their choice of the brand. It is concluded that the Hero Honda motor company gaining market share in Two Wheeler Industry and what happen after split the Honda. (Balakarishnan, 2013)

Study has taken the initiative to understand the close relationship of advertising and the consumer behavior with a special reference to two-wheeler. Authors have tried to analyze the impact advertising can have on the buying behaviour of consumers in Two-Wheelers segment. (Jha, Sirohi, Madan, & Arora, 2011)

Study has measured the role of family members and its influence on purchase decision for two-wheelers in districts of Andhra Pradesh. It empirically proved that there is an influence of family members in purchase decision of two-wheelers. Suggested tha the marketers of two-wheeler must frame their product design and communication strategy in such a way that it must appeal. (Bai, 2012)

(Laldinliana, 2012) Study tried to identify which of the ancillary attributes play prominence in the buying behaviour of the rural and urban Mizoram consumers with respect to two-wheelers and four-wheelers.

Research Methodology:

researcher observed that there are a many research studies undertaken to know the buying preference of consumers in Two Wheelers. However, the behavior of consumer differs from time to time and place to place. Satara is a small town, which is village based and now upcoming for slow development; new Two wheeler showrooms have been started in Satara city. Young population especially college going students are preferring more. It finds scope for two-wheeler market in Satara. However marketer should know the buying behaviour of college going students. So the efforts made to understand the brand preference and analyze existing pattern of Students in Two Wheelers purchasing. Also to know the factors influencing the brand preference and vehicle preference. The two hypotheses were set to test viz. H 0 1: There is no significant difference between Educational background and brand preference. H 0 2: There is no significant relationship between Educational Background and Buying Pattern. Structured schedule prepared to know the responses from college going students

Table 1: Demographic Profile

Following table shows the demographic profile of the respondents

(n=131)

Sr.	Particulars		Frequency	Percentage
1	Gender	Male	79	60.31
		Female	52	39.69
2.	Age Group	Below 20	29	22.14
		21-25	99	75.57
		26-30	2	1.53
		Above 30	1	0.76
3.	Educational background	Traditional Education (B.A.B.Com.B.Sc.)	32	24.43
		Technical	32	24.43
		Managerial	37	28.24
		Other	30	22.90

Source: Field Data

Majority of respondents are male and lies in the age group of 21-25 and nearly 22 to 24% students having either traditional educational background, technical, managerial or other than mentioned

Table 2: Buying Pattern

Buying pattern of student respondents measured with their brand preference, rationality to prefer the brand, actual price paid for the vehicle, information source used to know about vehicle, source for finance adopted, purchased from and purchasing criteria adopted for purchasing Two-wheeler.

(n=131)

Sr.	Particulars		Frequency	Percentage
1	Brand Preferred by Student	Hero	44	33.59
		Honda	31	23.66
		Yamaha	8	6.11
		TVS	16	12.21
		Bajaj	12	9.16
		Suzuki	20	15.27
2.	Rationality to Prefer	Reliability	53	40.46
		Availability	11	8.40
		Quality	57	43.51
		Value for money	10	7.63
3.	Price Paid	Below Rs50000	8	6.11
		Rs50000-70000	92	70.23
		Rs70000-90000	25	19.08
		Above Rs90000	6	4.58
4.	Information Source Used	Advertisement	28	21.37
		Magazines	8	6.11
		Friends	70	53.44
		Relatives	24	18.32
		Colleague	1	0.76
5.	Source for Finance Adopted	Bank Loan	17	12.98
		Finance Company	9	6.87
		Self Financing	101	77.10
		Any Other	4	3.05
6.	Purchased Through	Authorized Distribution	27	20.61
		Show room near the city	95	72.52
		Online Booking	7	5.34
		Other	2	1.53
7.	Purchasing Criteria	Cash	106	80.92
		Offer	5	3.82
		Installment	20	15.27

Source: Field Data

The above data depicts that 33.59% respondents preferred Hero brand in Two Wheelers, 23.66% Honda, 6.11% Yamaha, 12.21% TVS and very few 9.61% Bajaj. It means Hero Followed by Honda are most preferred brand by the respondents and Bajaj is least preferred among the students. Reliability and Quality are the rationality behind these preference. The purchasing power indicates through the price paid by the respondents. The majority of respondents fall in the price range of 50000-70000. Friends is most reliable sources used by the 53.44% respondents in purchasing the two wheeler. Self Financing option preferred by 77.10% of respondents compared to loan and other options. 72.52% respondents have purchased two wheeler from show room near city. 80.92% respondents have made cash payment in two wheeler purchasing.

Table 3: Factors Considered in Selection of Vehicle

Eleven factors viz. style, colour, price, Pickup, mileage, maintenance, look, engine, resale value, brand image and luggage space were listed to know the responses of students regarding the consideration in selection of vehicle. The said responses measured with five point likert scale as 1 for not at all considered to 5 for highly considered factor. These data analyzed with mean and standard deviation and presented as below.

(n=131)

Sr.	Product Mix	Mean	SD
1	Style	3.77	0.91
2	Colour	4.02	0.92
3	Price	3.85	0.76
4	Pickup	4.26	0.76
5	Mileage	4.31	0.83
6	Maintenance	4.04	0.86
7	Look	4.11	0.79
8	Engine	4.05	0.92
9	Resale value	3.35	0.87
10	Brand Image	3.91	0.87
11	Luggage Space	3.60	0.97

Source: Field Data

All given factors viz. style, colour, price, pickup, mileage, maintenance, look, engine, resale value, brand image and luggage space are considered in selection of vehicle as the mean score is more than 3 with less standard deviation. However, colour, pickup, mileage, maintenance, look and engine are highly considered as the mean score is more than 4 with less deviation. It reveals that colour, pickup, mileage, maintenance, look and engine are highly considered by students in selection of vehicle.

Table 4: Factors Influences for Vehicle Preference

Vehicle preference i.e. product preference influences listed with 8 given factors viz. cost, mileage, low maintenance, durability, after sales services, exchange offers, availability of spare parts and resale value and the said data collected on likert scale as 1 for not at all influences and 5 for highly influences and analyzed with mean and standard deviation. The data presented as follows.

(n=131)

Sr.	Product Mix	Mean	SD
1	Cost	3.53	0.84
2	Mileage/Average	4.23	0.79
3	Low Maintenance	3.89	0.80
4	Durability	3.82	0.78
5	After Sales Services	3.69	0.78
6	Exchange Offers	3.29	0.80
7	Availability of Spare Parts	3.77	0.83
8	Resale Value	3.50	0.94

Source: Field Data

In actual vehicle preference mileage/average is highly influences the respondents as the mean score is more than 4 i.e. 4.23 with less deviation. Otherwise other factors cost, low maintenance, durability, after sales services, exchange offers, availability of spare parts and resale value also influences the respondents in vehicle preference since the mean score is more than 3 but less than 4 with less deviation.

Table 5: Factors Influences for Brand Preference

Generally reliability, popularity, status symbol and loyalty like factors influences for brand preference so they are listed to know the response from students and data collected on likert scale as 1 for not at all influences to 5 for highly influenced and data analyzed with mean and standard deviation and presented below.

(n=131)

Sr.	Factor	Mean	SD
1	Reliability	3.82	0.76
2	Popularity	4.15	0.79
3	Social Status	4.14	0.91
4	Brand Loyalty	4.24	0.80

Source: Field Data

Popularity, Social Status and Brand Loyalty are highly influences for brand preference among the respondents as mean score is more than 4 and Reliability is also well influences for brand preference.

Table 6: Like to Prefer the Brand in Future in Two Wheelers

Respondents registered their opinion about the

Hypotheses Testing

H01: There is relationship between educational background and brand preference

Table 7: Descriptive Analysis of Brand Preference as per Educational Background of the Respondents

		Brand Preference						Total
		Hero	Honda	Yamaha	TVS	Bajaj	Suzuki	
Educational Background	Traditional	11	6	2	5	3	5	32
	Technical	12	9	1	3	6	1	32
	Managerial	8	7	3	3	2	14	37
	Other	13	9	2	5	1	0	30
	Total	44	31	8	16	12	20	131

Source: Compiled by Researcher

interest to buy the two wheeler brand in future. Responses obtained and measured with frequency and analyzed with percentage and presented in tabulation which is as follows.

(n=131)

Sr.	Like to buy in Future	Frequency	Percentage
1	Hero	41	31.30
2	Honda	36	27.48
3	Yamaha	17	12.98
4	TVS	6	4.58
5	Bajaj	12	9.16
6	Suzuki	19	14.50
	Total	131	100.00

Source: Field Data

Majority of respondents shows their interest to buy Hero(31.30%) and Honda(27.48%) brand in future.

Parameters influences purchasing decision of Two Wheelers . TVS(4.58%) and Bajai(6.16%) presence among the respondents.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	31.188a	15	.008
Likelihood Ratio	33.588	15	.004
Linear-by-Linear Association	.638	1	.424
N of Valid Cases	131		

a. 15 cells (62.5%) have expected count less than 5. The minimum expected count is 1.83.

Since P value 0.008 > α (0.05), we do not reject null hypothesis. Thus there is no significant relationship between educational background and brand preferred by the respondents in two wheeler vehicle.

H 0 2: There is no significant relationship between Educational Background and Buying Pattern.

To test the set hypotheses researcher has used chi-square and considered Pearson correlation significant two sided distribution value to accept and reject the set hypotheses

Table 8: Discriptive Analysis of Buying Pattern of Respondents with Educational Background

Sr. Buying Pattern	Educational background				Total	P value
	Traditional	Technical	Managerial	Other		
1. Rationality						
Reliability	9	14	15	15	53	
Availability	9	0	1	1	11	
Quality	12	15	18	12	57	0.007
Value for Money	2	3	3	2	10	
Total	32	32	37	30	131	
2. Price Range Paid						
Below 50000	2	1	4	1		
50000-70000	24	23	22	23	92	
70000-90000	4	6	10	5	25	0.749
90000 and above	2	2	1	1	6	
Total	32	32	37	30	131	
3. Information Source Used						
Advertisement	7	4	12	5	28	
Megazines	4	2	2	0	8	
Friends	12	19	18	21	70	0.148
Relatives	9	7	4	4	24	
Colleagues	0	0	1	0	1	
Total	32	32	37	30	131	

Sr. Buying Pattern	Educational background				Total	P value
	Traditional	Technical	Managerial	Other		
4. Source of Finance Used						
Bank Loan	7	2	8	0		
Fiancne Company	1	3	4	1	9	
Self Financing	23	25	25	28	101	170.085
Other	1	2	0	1	4	
Total	32	32	37	30	131	
5. From Where to Purchase	Traditional	Technical	Managerial	Other	Total	P value
authrorised Distributor	1	8	6	12	27	
Show Room near the city	30	24	25	16	95	
Online Booking	1	0	5	1	7	0.005
Other	0	0	1	1	2	
Total	32	32	37	30	131	
6. Process adopted to Purchase	Traditional	Technical	Managerial	Other	Total	P value
Cash	23	28	27	28	106	
Offer	3	1	1	0	5	0.139
Installment	6	3	9	2	20	
Total	32	32	37	30	131	

Above overall calculated p value of all the variables of buying pattern is more than a 0.05, therefore we do not reject null hypothesis. Thus there is no significant relationship between educational background and buying pattern adopted in purchasing of two wheeler by student respondents. However, From where to purchase makes the difference where the p value is 0.005 = a0.05 It means the data is adequate to reject null hypothesis that there is no significant relationship between educational background and from where to purchase. The alternative hypothesis is accepted that there is significant relationship between educational background and from where to purchase the vehicale

Table 9: Two Wheeler Industry Sales and Growth Status in India During 2015

Following table reflects the respective sales of each two wheeler brand and its growth from July 2014 to July 2015

Two Wheelers	July' 15	July' 14	Difference	
			Units	Growth (%)
Bajar Auto	1,43,671	1,25,053	18,618	14.89%
Hariey-Davidson India	309	524	-215	-41.03%
Hero MotoCrop	4,65,101	5,16,661	-51,560	-9.98%
HMSI	3,71,349	3,63,977	7,372	2.03%

Two Wheelers	July' 15	July' 14	Difference	
			Units	Growth (%)
India Kawasaki Motors	83	126	-43	-34.13%
India Yamaha Motor	58,477	50,286	8,191	16.29%
Mahindra Two Wheelers	12,708	12,330	378	3.07%
Piaggio Vehicles	2,393	2,012	381	18.94%
Royal Enfield	39,867	26,796	13,071	48.78%
Suzuki Motorcycle India	32,320	25,017	7,303	29.19%
Triumph Motorcycles India	80	109	-29	-26.61%
TVS Motor Co	1,74,099	1,64,571	9,528	5.79%
Total	13,00,457	12,87,462	12,995	1.01%

Source: Secondary Data

Hero MotoCorp, commands 71 percent market share in the commuter bike segment, sold 4,87,580 units in July 2015, down 7.98 percent (July 2014: 529,862 units). Honda Motorcycle & Scooter India sold 371,349 units in July 2015, up 2.03 percent. Interestingly, the company sold 112,037 motorcycles in July 2015 as against 148,012 units sold in July last year. Bajaj Auto clocked total sales of 282,433 units (including exports) in July 2015, up by 5.45 percent (July 2014: 267,841). TVS Motor Company is also struggling with low rural demand. In the absence of new bike rollouts, the company sold 174,099 units in July 2015 (July 2014: 175,8030, down 0.97 percent. While scooter sales are up 10 percent (July 2015: 69,626 units), motorcycle sales were down to 77,397 units from 80,658 units sold in July 2014. New models, including a premium bike, are expected to be rolled out in a few weeks from now. Yamaha Motor has sold 58,591 units, up 16.52 percent (July 2014: 50,286). Suzuki Motorcycle India (SMIL) sold 36,081 units in July 2015, growing at 33 percent over July 2014's sales of 27,118 units. Royal Enfield, which sold 200 units of its limited edition Classic 500 Despatch models online within 26 minutes of opening the bookings on its online store, has registered strong domestic sales of 39,867 units in July 2015, up by 48.78 percent.

The company had sold 26,796 units in July 2014. Mahindra Two Wheelers sold 12,708 units in July 2015, up by 3.06 percent over its July 2014 sales of 12,330 units.

Conclusion

The sale of two-wheeler products has increased substantially. The sales volumes in the two-wheeler sector shot up from 15 percent to 24 percent between 2008-09 and 2013-14. Calculated data reveals that male respondents are more compared to female, comparing the other age groups the middle age between 21 to 25 are found more. Hero and Honda brand is more preferred brand among the students and least Bajaj. Reliability and quality are reasoned to prefer the brand. Rs. 50000-70000 are preferred price range in two wheelers by Student respondents. Friends are most reliable source preferred among the students. Self-financing is more preferred by the students. Majority student have preferred to purchase vehicle from show room near city. 80.92% made the cash payment in purchasing the two-wheeler. Colour, Pickup, mileage, maintenance, look and engine are highly considered by students in selection of vehicle. In vehicle preference, mileage and average factors are highly influences the students whereas popularity, social status and brand loyalty are

highly influences for brand preference among the students. Students showed their interest in Hero and Honda brand to purchase in future. It proved that there is no significant relationship between educational background and brand preferred by the respondents in two wheeler vehicle. Also proved that there is no significant relationship between educational background and buying pattern of students but from where to purchase the vehicle has significant relationship with educational background. The research findings indicate the various characteristics of two-wheeler consumer behavior in the Satara city, Maharashtra. These observations if taken into consideration by the manufacturers will positively influence the sales, as it would cater to the needs of the potential two wheeler consumers.

Managerial Implications

Since students of both category using the two wheeler where male are more compared to female, Hero and Honda are most preferred brand by the students and also wish to buy in future. Friendship is the reliable source used to know the vehicle and price range affordability lies into the range of Rs. 50000-70000, Reliability and quality are resoned in preference of brand among the students. Mileage and average are highly influences to students. in preference of vehicles in Satara city. From where to purchase vehicle influenced by educational background. Since the managerial course college going students observed almost all the options to purchase and rest of the respondents more rely on show room near the city. So company can use this base for segment and market their products. Researcher strongly believes that company like Hero and Honda has potential to sale their two wheelers in Satara city. However, in promoting their vehicles they should consider their buying pattern and develop their marketing strategy accordingly.

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Sustainable Development- A Way through Activity Based Costing

A.M. Gurav

Abstract:

Activity-Based Costing (ABC) is a simple concept which is useful for sustainable development of the industries. Costs are either assigned directly to a job, product, or service, or they are assigned to the various activities performed by the organizations. Activity based costing allows to identify the policies, systems or processes that trigger the activity, thereby creating cost. ABC is the perfect solution to overcome the problem of incorrect calculation of the product cost which becomes way to sustainable development. ABC is management tool which provides the accurate and relevant cost information to the manager. ABC helps for pricing decision, core business decision, strategic / product-line pricing, capital expenditure decision, outsourcing, make / buy, which is very much required for sustainable development. The ABC can use SAP-ERP, PERT-CPM, management approach, awareness of activity based costing system, awareness of cost driver, awareness of cost centre, bases used for determining cost driver, awareness about the inter firm comparison and inter firm transfer price and so on required for the successful implementation of the activity based costing system. Writer has referred Kolhapur district where 14,280 Micro, 5,360 Small, 17 Medium and 553 large manufacturing units have been working from which 60 sample units have considered for all MIDCs for data collection.

Keywords: ABC, Sustainable Development, Pricing Decision, PERT-CPM.

Introduction :

Activity-Based Costing (ABC) is a simple concept that is used to develop the accurate and relevant cost information needed to support all types of business decisions and sustainability. This concept links costs with the activities and the accumulated cost of activities with the products or services. The concept of activity-based costing is based on cost information, which provides correct and relevant

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cost to the owners and managers of all types of organizations which is helpful for concentrating on more profitable contract, use capital funds more effectively, make better make/buy decisions, focus continuous improvements of areas with the greatest return, and generally make more informed and, as a result more effective business decisions is possible for sustainable development. Costs are either assigned directly to a job, product, or service, or they are assigned to the various activities performed by the organizations. Activity based costing allows to identify the policies, systems or processes that trigger the activity, thereby creating cost. Activity based costing traced out what really drives costs and allows the business

organization to attack and reduces the fixed costs, such as sales force expenses, engineering, planning and depreciation. Activity based costing by identifying the activities that create cost and the triggers that create activities, allows a firm to take control of its costs and destiny.

In 1980 some industry and academics recognize the serious defects of the existing cost systems and their adverse effects. General motors' not only spent \$40 billion on automation and new facility, but bought five machine-vision suppliers and formed a joint venture with France to build robots. In 1984 two esteemed accounting professors, Dr. Robert Kaplan, from Carnegie-Mellon University and Dr. Tom Johnson of Portland State University starts to expound the shortcomings of the existing cost accounting systems. Concurrently, Dr. Robin Cooper of the Harvard Business School developed a new costing system while making cost consultancy. This new cost system allocated costs on overhead transactions or activity. This method was called activity-based costing. In the traditional costing it is assumed that the volume is creating all costs, but activity based costing clears that the cost is not related with the volume of the products. Because some activities are not required for the each unit processed but the whole batch of that unit requires. ABC is the perfect solution to overcome the problem of incorrect calculation of the product cost. It provides the information to identify the components of overhead like product design, development, production and distribution more accurately for decision making. In first phase it collect the information regarding necessary costs and benefits resulted from the implementation of new system. In second phase information obtained from first phase used to justify the investment for the proposed material handling system by using an investment decision model that performs an Economic Value Analysis (EVA) with comparing different material handling alternatives. It is concluded that using activity based costing information together with economic value analysis improve decisions regarding the investments in

new technology. The cost drivers used in an activity based costing system require the measurement of some unique attributes of each product. ABC is management tool which provides the accurate and relevant cost information to the manager. The basic cost distribution mechanics of activity based costing are a means of developing accurate, fully absorbed cost information. ABC helps for pricing decision, core business decision, strategic / product-line pricing, capital expenditure decision, outsourcing, make / buy, which is very much required for sustainable development. Activity based costing provides cost which is directly traceable and applicable to the cost-generating process, cause-and-effect relationship, the activity based costing system provides facility to evaluation of day-to-day decision in terms of their impact on resource consumption downstream. This means that products will be charged with the costs of manufacturing and nonmanufacturing activities. The major benefit of the activity based costing is that a product is only charged with the cost of capacity utilized. Idle capacity is isolated and not charged to a product. The writer has taken due care while selecting the variable for the data collection. The present costing technique i.e. activity based costing studied in this research is unique in nature and it is also an innovative costing tools. The ABC can use SAP-ERP, PERT-CPM, management approach, awareness of activity based costing system, awareness of cost driver, awareness of cost centre, bases used for determining cost driver, awareness about the inter firm comparison and inter firm transfer price and so on required for the successful implementation of the activity based costing system.

Scope and Significance:

The present study has wide scope to know and implement the ABC in manufacturing industries. The geographical area of the present study is restricted only up to Kolhapur region and four industrial estates i.e Shivaji Udyamnagar, Shirol MIDC, Gokulshirgaon MIDC and Kagal Five Star MIDC with 60 sample units. The present study

covers the present costing system existing in the manufacturing units and its impact on the overall performance of the organization. The ABC help for production, supportive activities and product costs, so that management can focus its attention on the products and process, with the most leverage for increasing profits. It helps managers to make better decisions about product design, pricing, marketing and encourage continuous operating improvement. This method facilitates all organizational expenses to be allocated to different levels of work where cause and effect cost assignments can be established. ABC is required for effective utilization of all resources which are scarce in nature with cause-and-effect relationship between cost factor and a specific activity. The ABC is useful for pricing decision, core business pricing, special order pricing, strategic / product line pricing, long-term contract, capital expenditure decision, outsourcing, make/buy decision etc which is very much required for sustainable development.

Research Methodology:

The present study is conducted in the application of costing tools in manufacturing industries in Kolhapur to test the hypothesis, that the Activity

Based Costing is very much useful for inter firm comparison, which is not found in the sample units, where as ABC is helpful for cost control, cost reduction and value addition in selected sample units for sustainable development.

Paper put forth two objectives one is, to know the awareness and use of Activity Based Costing in sample industries for sustainable development and to draw appropriate conclusion of ABC for sustainable development.

Paper writer has taken help of the Ph. D. research student and covered four industrial estates out of them three are working under Maharashtra Industrial Development Corporation i.e. (MIDC) and one is Co-op Industrial Estate. In Kolhapur district there are 14,280 Micro manufacturing units, 5,360 Small manufacturing units, 17 Medium manufacturing units and 553 Large manufacturing units. The Universe form Shivaji Udaymnagar is 15 out of 121, Shiroli MIDC is 15 out of 144, Gokul Shirgaon MIDC is 15 out of 129, and Kagal Five Star MIDC is 15 out of 42. The total 60 sample units have considered for data collection as a manufacturing units. A sample size design is on the basis of following formula under finite population method.

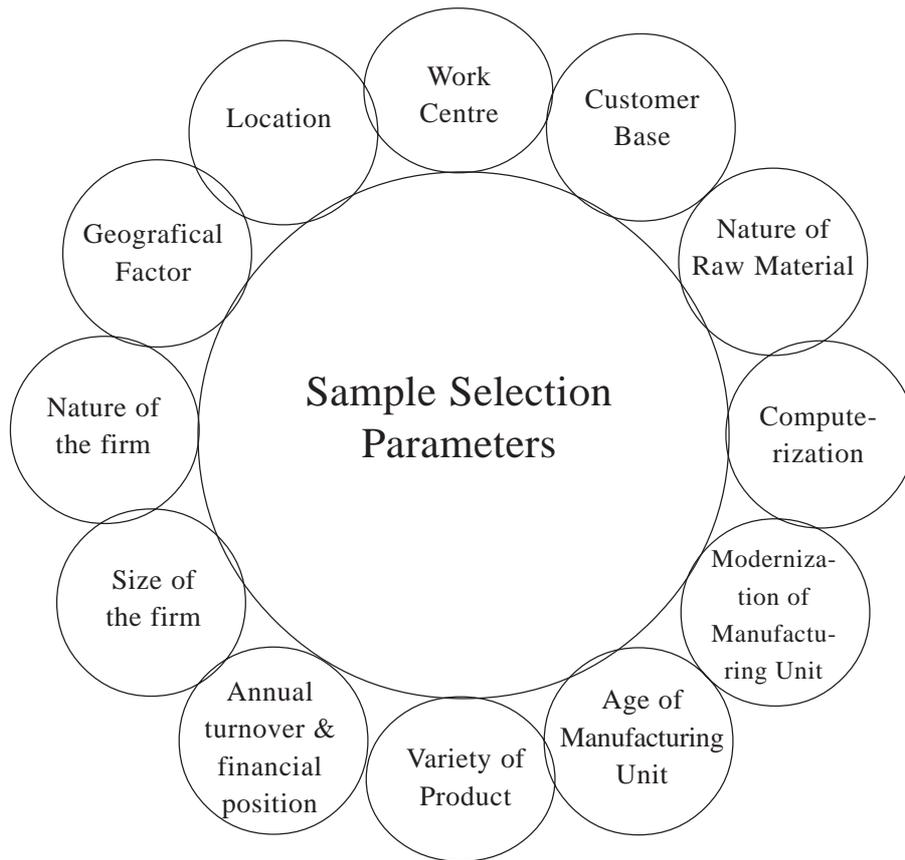
$$n = \frac{Z^2 \cdot p \cdot q \cdot N}{e^2 (N-1) + Z^2 \cdot p \cdot q}$$

N = 436. e = 0.12 (at level of 12% variation). Z = 1.96 (for 5% level of significant or 95% confidence level). p = 0.50 Probability of success. q = 0.50 Probability of failure

$$n = \frac{3.8416 \times 0.5 \times 0.5 \times 436}{0.0144 \times 435 + 3.8416 \times 0.5 \times 0.5} = \frac{418.7344}{6.1335 + 0.9604}$$

Sustainable Development - A Way through Activity Based Costing

n = 59.0274 (Sample size) **Writer has selected 60 samples.**



Data Analysis and Interpretation:

The collected data is presented here in the tabular form along with its interpretation by using different variables studied in the present study. Along with this the data has been tasted with the help of statistical tools for testing of predetermined hypotheses of the study. This paper has focused on **Sustainable Development - A Way Through Activity Based Costing.**

Table 1: Relation between awareness of ABC and bases used for determining cost drivers.

Bases used for determining cost drivers	Awareness of activity based costing			Total
	Yes	No	Some what	
Volume based	2 (4.67)	37 (34.67)	1 (0.67)	40
Transaction based	1 (1.52)	12 (11.27)	0 (0.22)	13
Duration based	0 (0.00)	0 (0.00)	0 (0.00)	0
Fixed cost based	1 (0.35)	2 (2.60)	0 (0.05)	3
Variable cost based	3 (0.47)	1 (3.47)	0 (0.07)	4
Total	7	52	1	60
	Level of significance			0.05
	Degree of Freedom			6
	The critical value of Chi-square			12.5916
	The calculated value of Chi-square			19.2577

(Figures indicated in bracket is expected frequency of chi-square)

Table no.1 has shown the correlation between awareness of ABC and bases used for determining cost drivers. The variables have tested with the help of chi-square test. It is observed from the above table that at 0.05% level of significance with the 6 degree of freedom calculated value of the chi-square (19.2577) is greater than the critical value of chi-square (12.5916). The degree of freedom is calculated on the basis of total rows in the table minus (-) one i.e. (4-1=3) multiplies by total of the columns minus (-) one i.e. (3-1=2), that means two multiply by two i.e. $3 \times 2 = 6$ which

is the degree of freedom. It is noted that while calculating degree of freedom, if any row or column having all values are zero then the same row or column should be excluded from the total of rows and columns. Hence it is accepted at 95% level of confidence that there **is significant** association between the awareness of activity based costing and bases used for determining cost drivers. It can be interpreted that cost drivers are important for implementation ABC for sustainable development of manufacturing sector.

Table 2: Relation between techniques used for cost & profit decision with nature of industries.

Techniques used for cost and profit decision.	Nature of Industries			Total
	Foundry Industry	Machine Industry	Fabrication Industry	
Cost volume profit analysis	20 (23.50)	5 (3.00)	5 (3.50)	30
Break even analysis	15 (12.53)	1 (1.60)	0 (1.87)	16
Budgetary control	7 (6.27)	0 (0.80)	1 (0.93)	8
Standard costing	5 (3.92)	0 (0.50)	0 (0.58)	5
Any other	0 (0.78)	0 (0.10)	1 (0.58)	1
Total	47	6	7 (0.12)	60
	Level of significance			0.05
	Degree of Freedom			8
	The critical value of Chi-square			15.5073
	The calculated value of Chi-square			14.9196

(Figures indicated in bracket is expected frequency of chi-square)

Table no.2 focused on Relation between techniques used for cost & profit decision with nature of industries by chi-square test. It is observed from the above table that at 0.05% level of significance with the 6 degree of freedom calculated value of the chi-square (14.9196) is less than the critical value of chi-square (15.5073). The degree of freedom is calculated on the basis of total rows in the table minus (-) one i.e. (5-1=4) multiplies by total of the columns minus (-) one i.e. (3-1=2), that means two multiply by two i.e. $4 \times 2 = 8$ which is the degree of freedom. It is noted that while calculating degree of freedom, if any

row or column having all values are zero then the same row or column should be excluded from the total of rows and columns. Hence it is accepted at 95% level of confidence that there is **no significant** association between the technique used for cost and profit decision with respect to nature of industries. It can be interpreted that there is no any relation between nature of industry and technique used for cost and profit. In short the cost and profit decisions can be taken independently without considering nature of the industry. For sustainable development one should take independent decisions regarding cost and profit through ABC.

Table 3: Relation between awareness of ABC system & problems in using traditional costing system.

Problems in traditional costing	Awareness of activity based costing			Total
	Yes	No	Some what	
Costly	1 (0.35)	2 (2.60)	0 (0.05)	3
Time consuming	3 (1.75)	12 (13.00)	0 (0.25)	15
Wastage of energy	3 (4.67)	36 (34.67)	1 (0.67)	40
Any other	0 (0.23)	2 (1.73)	0 (0.03)	2
Total	7	52	1	60
	Level of significance			0.05
	Degree of Freedom			6
	The critical value of Chi-square			12.5916
	The calculated value of Chi-square			3.7363

(Figures indicated in bracket is expected frequency of chi-square)

Table no.3 shows Relation between awareness of ABC system & problems in using traditional costing system with correlation between the variables of ABC with the help of chi-square test. It is observed from the above table that at 0.05% level of significance with the 6 degree of freedom calculated value of the chi-square (3.7363) is less than the critical value of chi-square (12.5916). Hence it is accepted at 95% level of confidence

that there is **no significant** association between the awareness of activity based costing and problems in use of traditional costing system. It means that that there is no any correlation between these two bunches of variables and vice-a-versa. In short ABC awareness has not affecting on use of traditional costing. It can be implied that there is a scope for sustainable development by using ABC where traditional costing awareness has not affecting.

Table 4: Relation between methods used for stock valuation with nature of industry.

Methods used for stock valuation	Nature of Industries			Total
	Foundry Industry	Machine Industry	Fabrication Industry	
FIFO	0 (0.00)	0 (0.00)	0 (0.00)	0
LIFO	30 (28.98)	1 (3.70)	6 (4.32)	37
Simple average	15 (15.67)	4 (2.00)	1 (2.33)	20
Weighted average	1 (1.57)	1 (0.20)	0 (0.23)	2
Base stock	1 (0.78)	0 (0.10)	0 (0.12)	1
Total	47	6	7	60
	Level of significance			0.05
	Degree of Freedom			6
	The critical value of Chi-square			12.5916
	The calculated value of Chi-square			9.3675

(Figures indicated in bracket is expected frequency of chi-square)

Table no.4 indicates the relation between methods used for stock valuation with nature of industry. Writer has tries to find out the correlation between the variables of methods used for stock valuation with the help of chi-square test. It is observed from the above table that at 0.05% level of significance with the 6 degree of freedom calculated value of the chi-square (9.3675) is less than the critical value of chi-square (12.5916). Hence it is accepted at 95% level of confidence that there is **no**

significant association between the methods used for stock valuation and the nature of industries. It can be interpreted that there is no direct relation between methods of valuation and nature of industries. As per the observation and general experience it can be concluded that there is positive partial correlation between methods used for stock valuation with nature of industry. It is for **Sustainable Development by way of Activity Based Costing.**

Table 5: Relation between awareness of activity based costing with respect to ownership of firm.

Types of ownership	Awareness of activity based costing			Total
	Yes	No	Some what	
Sole proprietorship	4 (2.80)	20 (20.80)	0 (0.40)	24
Partnership	2 (1.40)	10 (10.40)	0 (0.20)	12
Pvt. Ltd.	1 (2.80)	22 (20.80)	1 (0.40)	24
Joint Stock	0 (0.00)	0 (0.00)	0 (0.00)	0
Total	7	52	1	60
	Level of significance			0.05
	Degree of Freedom			4
	The critical value of Chi-square			9.4877
	The calculated value of Chi-square			3.5440

(Figures indicated in bracket is expected frequency of chi-square)

Table no.5 indicates the correlation between the variables of ownership of organization and awareness of ABC with the help of chi-square test. It is observed from the above table that at 0.05% level of significance with the 4 degree of freedom calculated value of the chi-square (3.5440) is less than the critical value of chi-square (9.4877). Hence it is accepted at 95% level of confidence that there is **no significant** dependency between types of ownership and awareness of activity based

costing. It is noted that type of ownership is not affecting on ABC awareness. The Sole Trading, Partnership, Private Company, Joint Stock Company etc and awareness of ABC not having any correlation. In short for sustainable development this awareness is very much required. The MIDC's and Industrial Associations should take special efforts for creating awareness of ABC in all types of ownership.

Table 6: Relation between awareness of ABC with methods of production

Methods of production	Awareness of activity based costing			Total
	Yes	No	Some what	
Manual	0 (0.12)	1 (0.87)	0 (0.02)	1
Mechanized	2 (2.10)	16 (15.60)	0 (0.30)	18
Highly technical machine	5 (4.20)	30 (31.20)	1 (0.60)	36
Any other	0 (0.58)	5 (4.33)	0 (0.08)	5
Total	7	52	1	60
	Level of significance			0.05
	Degree of Freedom			6
	The critical value of Chi-square			12.5916
	The calculated value of Chi-square			1.7033

(Figures indicated in bracket is expected frequency of chi-square)

Table no.6 shows the correlation between the variables of production methods with ABC with the help of chi-square test. It is observed from the above table that at 0.05% level of significance with the 6 degree of freedom calculated value of the chi-square (1.7033) is less than the critical value of chi-square (12.5916). Hence it is accepted at 95% level of confidence that there is **no significant**

association between methods of production in sample units with respect to awareness of activity based costing. It means that there is no correlation between awareness of ABC and production method. It indicates that ABC has not direct relation with method of production. In short ABC is useful for **Sustainable Development**.

Table 7: Relation between awareness of ABC with computerization.

Computerization in sample units	Awareness of activity based costing			Total
	Yes	No	Some what	
Fully computerized	7 (6.30)	46 (46.80)	1 (0.90)	54
Partly computerized	0 (0.58)	5 (4.33)	0 (0.08)	5
No computerization	0 (0.12)	1 (0.87)	0 (0.02)	1
Total	7	52	1	60
	Level of significance			0.05
	Degree of Freedom			4
	The critical value of Chi-square			9.4877
	The calculated value of Chi-square			1.0256

(Figures indicated in bracket is expected frequency of chi-square)

Table no.7 shows the correlation between the variables of computerization and ABC with the help of chi-square test. It is observed from the above table that at 0.05% level of significance with the 4 degree of freedom calculated value of the chi-square is (1.0256) less than the critical value of chi-square (9.4877). Hence it is accepted at 95% level of confidence that there is **no significant** association between the sample units having

awareness of activity based costing with computerization in sample units. It means that the sample units are not aware about computerization in relation with ABC. It is true that computerization is very much required for implementation of ABC in sample manufacturing units. To operate quick and accurate calculation computerization is required. It is found that the Sustainable Development is the way of Activity Based Costing

Table 8 : Relation between awareness of ABC with respect to use of SAP - ERP.

Use of SAP / ERP	Awareness of activity based costing			Total
	Yes	No	Some what	
Yes	7 (5.25)	37 (39.00)	1 (0.75)	45
No	0 (1.75)	15 (13.00)	0 (0.25)	15
Some time	0 (0.00)	0 (0.00)	0 (0.00)	0
Can't say	0 (0.00)	0 (0.00)	0 (0.00)	0
Total	7	52	1	60
	Level of significance			0.05
	Degree of Freedom			2
	The critical value of Chi-square			5.9915
	The calculated value of Chi-square			3.0769

(Figures indicated in bracket is expected frequency of chi-square)

Table no. 8 highlights the correlation between the variables of ERP-SAP and ABC with the help of chi-square test. It is observed from the above table that at 0.05% level of significance with the 2 degree of freedom calculated value of the chi-square is (3.0769) less than the critical value of chi-square (5.9915). The degree of freedom is calculated on the basis of total rows in the table minus (-) one i.e. (2-1=1) multiply by total of the columns minus (-) one i.e. (3-1=2), that means two multiply by two i.e. $1 \times 2 = 2$ which is the degree of freedom. It is noted that while calculating degree of freedom, if any row or column having

all values are zero then the same row or column should be excluded from the total of rows and columns. Hence it is accepted at 95% level of confidence that there is **no significant** association between the firm using SAP-ERP software with respect to firm having awareness of activity based costing. It is implied that awareness of ABC is not having any direct relation with SAP-ERP. It is noted that SAP-ERP is useful for implementation of ABC in manufacturing industry. It is true that the sample respondents have not aware the correlation between ABC and SAP-ERP. SAP-ERP is required for Sustainable Development.

Table 9: Relation between awareness of ABC and use of PERT - CPM techniques.

Firm uses PERT / CPM techniques	Awareness of activity based costing			Total
	Yes	No	Some what	
Yes	2 (1.17)	7 (8.67)	1 (0.17)	10
No	5 (5.72)	44 (42.47)	0 (0.82)	49
Some time	0 (0.00)	0 (0.00)	0 (0.00)	0
Can't say	0 (0.12)	1 (0.87)	0 (0.02)	1
Total	7	52	1	60
	Level of significance			0.05
	Degree of Freedom			4
	The critical value of Chi-square			9.4877
	The calculated value of Chi-square			6.1981

(Figures indicated in bracket is expected frequency of chi-square)

Table no.9 shows the correlation between the variables of PERT-CPM and ABC with the help of chi-square test. It is observed from the above table that at 0.05% level of significance with the 4 degree of freedom calculated value of the chi-square is (6.1981) less than the critical value of chi-square (9.4877). Hence it is accepted at 95% level of confidence that there is **no significant** association between the firm uses PERT - CPM technique with respect to firms having awareness

of activity based costing. It indicates that the sample respondents have not aware about PERT-CPM for the implementation of ABC. It is true that the sample units are not using ABC, so they are not aware about ABC. To implement ABC, PERT-CPM awareness is very much required. One should be trained the sample respondents about PERT-CPM, which will help for implementation of ABC. PERT-CPM is required for sustainable development at present scenario.

Table 10 :Relation between implementation of ABC and nature of industries.

Sample units ready to implement activity based costing.	Nature of Industries			Total
	Foundry Industry	Machine Industry	Fabrication Industry	
Yes	31 (28.98)	2 (3.70)	4 (4.32)	37
No	1 (1.57)	1 (0.20)	0 (0.23)	2
Not decided	6 (7.83)	1 (1.00)	3 (1.17)	10
Can't say	9 (8.62)	2 (1.10)	0 (1.28)	11
Total	47	6	7	60
	Level of significance			0.05
	Degree of Freedom			6
	The critical value of Chi-square			12.5916
	The calculated value of Chi-square			9.9297

(Figures indicated in bracket is expected frequency of chi-square)

Table no.10 shows the correlation between the variables of nature of industries and ABC with the help of chi-square test. It is observed from the above table that at 0.05% level of significance with the 6 degree of freedom calculated value of the chi-square is (9.9297) less than the critical value of chi-square (12.5916). Hence it is accepted at 95% level of confidence that there is **no significant** association between the sample units ready to implement activity based costing with respect to nature of industries. It is noted that the nature of industry has no any direct correlation with ABC implementation. Broad basely it may true but in micro manner, there should be positive partial correlation between ABC implementation and nature of implementation. In short the all type of industries should be used ABC for sustainable development.

Conclusion:

The writer has tabulated the collected data in 10 different tables as per the nature of variable. The writer has explained the types of manufacturing organization, use of computerization, use of technology, traditional costing technique; awareness of sample units regarding activity based costing system, etc. Also the writer has explained the nature and attitude of the management of the Kolhapur based manufacturing organization towards the use of costing technique. It is true that at present there is zero implementation of ABC system in Kolhapur based manufacturing organization. In the present study the writer has found that the manufacturing industries covered for the study is not much cautious about their product costing. In the present study the writer has tried to explain the need of activity based costing system in LPG scenario. Along with this the writer has explained the important terms like cost driver, cost center and cost pool which is used in the activity based costing system. The implementation of ABC is not completed here but the various factors are essential for its implementation and these factors are explained by the writer in his study and split them as dependent factor i.e. nature

of industries, awareness of activity based costing and sample units ready to implement activity based costing and under independent factor the writer has covered the factors like techniques used for cost and profit decision, methods of stock valuation, computerization, use of SAP-ERP software, use of PERT-CPM, listing of activities, awareness of cost center and cost drivers, awareness of inter firm comparison technique, inter-firm transfer price, use of ABC in decision making, management approach, awareness of process of ABC, types of ownership, methods of production etc. The data has been collected tabulated and analyzed and the result comes out that the activity based costing is useful for cost reduction and cost control in the selected sample units. Considering above all analysis and interpretation it has proved that, "**Sustainable Development - A Way Through Activity Based Costing**" in manufacturing industries. The set hypothesis, "The Activity Based Costing is very much useful for inter firm comparison, which is not found in the sample units, where as ABC is helpful for cost control, cost reduction and value addition in selected sample units for sustainable development" has proved.

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Medical Practitioners Prescribes Specific Product

Ganesh Pandit Pathak, Sarang Shankar Bhola

Abstract:

Customer orientation has become the winning business paradigm of our era for that customer should be viewed and treated as a strategic asset of the firm. Pharmaceutical companies are seeking ways to establish close and sustainable relation with customers. Medical practitioners are the key player in pharmaceutical industry. Medical representatives are developing relationship with doctor's i.e. Medical practitioners. This paper will talk about opinion of medical practitioners about reasons for prescribing product of specific company as well as Services and Facilities received by medical practitioners.

Keywords: Medical Practitioners, Pharmaceutical Industry, Relationship, Medical Representative, Buying behavior.

Introduction :

In marketing, customer relationship management highlights the final customer of the product and in pharmaceutical marketing patient may be the final customer. But sales representatives are developing the more relation with Doctors, stockiest and retailers. Since, Doctors prescribes the medicines of particular company, Stockiest and Retailers play important role in distribution channels at the same time retailers can increase sale by communicating with nearest doctors about

scheme or by substitute the prescription. For maintaining relations with customers companies are investing a crore of rupees by offering valuable gifts, articles as well as tours. So, there is need to study the actual reasons why medical practitioners are prescribing specific product. Several studies are undertaken for the analyzing behavior of prescribers some of this are mentioned in review of literature. In this paper researcher had taken opinion of medical practitioners about reasons for prescribing product of specific company as well as Services and Facilities Received by medical Practitioners.

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Review of Literature:

Physician and Payer's Behavior

As the pharmaceutical companies are more focuses on marketing strategy. There is need to analyze the behavior of physicians as well as the payers, some authors are commented on physician and payers behavior. Influence of payers and patients is increasing on prescribing decision whereas physician's influence is decreasing (Guenther, 2008). According to (Ravindra, 2009) in a detail-

intensive industry, segmentation based on the knowledge of physicians' prescription behavior does improve the accuracy of sales forecasts. Physicians are satisfied with physician-targeted communication strategies and greatly value two-way interactive approaches, though they have significantly differing attitudes across cultures towards the likely impacts of DTC advertising, with Greek physicians the most opposed. Planned value creation for manufacturers and consumers through DTC advertising conflicts with the value delivery for the intermediary physician, which delays the expansion of this advertising policy (Reast et.al, 2011).

Perception about Relationship:

As the pharmaceutical business is depends upon the prescribers, distributors and actual payers i.e. patients. Everyone takes efforts to develop and maintain relationship. But it is essential to analyze the perception of stakeholder about relationship. Relationship marketing is one of the primary drivers of sales in the pharmaceutical industry and its important to determine how physicians perceive pharmaceutical sales representative. Corporate image is a function of the signals that an organization transmits to its various stakeholder groups (Lundstrom et.al., 2004). According to (Srivastava, 2011) perception will influence relationships. Relationships are built by a combination of individual value systems, personal characteristics, and a company's product and image. Researcher discussed that physically attractive people perceived differently from unattractive people. Attractive individuals have been shown to receive more positive attributions of liking and expertise than less attractive applicants. If a pharmaceutical sales representative has a good attitude, is friendly, nice and pleasant to be around, physicians will hold positive perceptions about that individual (Lundstrom et.al., 2004). (Srivastava, 2011) discussed relationship marketing activities if touching an emotional cord can aid in the marketing of pharmaceutical products. It also assists in changing

perception of the company, as positive perception leads to an incremental increase in prescriptions.

It means perception about relationship is depends on many factors. Physicians are not only considering the detailing of product, product quality but the physical attractiveness of representative also affect.

Research Methodology:

The study is descriptive inferential in nature, which describes the existing customer relationship management in the pharmaceutical industry. Inferential approach is used to derive the data from samples. Data about demographic profile of respondents, different basis used for developing and maintaining the relationship, preferences, expectations, segmentation criteria, conceptual data on CRM, Segmentation, relationship marketing etc. was a need of study. The data and information collected by using Primary Sources and Secondary Sources. The primary data regarding demographic profile, different basis used for developing and maintaining the relationship, preferences, expectations, segmentation criteria were collected through Structured Schedules. 103 medical practitioners are selected as sample for the study. The data was entered in Ms-Excel with data validation check. The data was further validated with the help of SPSS. The filtered and validated data was subjected to test of reliability using Cronbach's Alpha. Data was classified and presented in tables. Data Analysis was done using percentage, measures of central tendency and measures of dispersion.

Reasons for Prescribing Product

Medical representative using various tools to motivate physician to prescribe and sale the product. Researcher has taken the opinions of medical practitioner about reasons behind prescribing particular product of company. Researcher has articulated 48 parameters which are considered as tool for marketing of product. The data on 5 point likert scale has collected and analyzed by using mean, standard deviation and ranks.

Table: 1
Opinion of Medical Practitioner on Prescribing Product of Any Company

(n=103)

Sr	Parameter	Mean	S.D.	Rank
1	Product by Reputed branded company	4.15	1.08	4
2	Unique combination of molecule	3.88	0.96	7
3	Combination as per case	3.94	0.97	6
4	Medical trails taken on different patient groups	3.82	0.99	11
5	Breadth of the product line offered	3.55	0.94	23
6	Product quality offered	4.23	0.94	3
7	Ease of product use for patient	4.06	0.96	5
8	Available in different form (Tablet, Syrup, Injection)	4.48	0.79	1
9	Available in different Size/Quantity (100ml, 200ml)	4.26	0.84	2
10	Price less than other available brands	3.73	0.88	14
11	Price as per quality of Product	3.78	0.90	12
12	More margin on MRP	3.14	1.12	38
13	Scheme given by Company, Stockiest	3.45	1.06	27
14	Ease of placing orders	3.68	0.93	16
15	On-time delivery of products	3.83	0.90	10
16	Accuracy of invoicing	3.46	0.89	26
17	Free samples/Drug Sample	3.61	0.95	20
18	Offer Pens and Pads	3.31	1.21	34
19	Offer Medical Books	3.62	1.01	19
20	Offer Other Book (Novel, Biography etc.)	3.40	1.17	30
21	Offer Other Stationery Materials	3.22	1.06	36
22	Financial assistance for conducting social activity	3.39	1.09	31
23	Financial assistance for purchasing any medical equipment	3.23	1.09	35
24	Financial assistance to Conduct Research	3.19	1.03	37
25	Railway/Airline tickets or Financial assistance for Travel	3.02	1.10	40
26	Sponsorship to an academic event	3.10	1.03	39
27	Conference/Travel Expenses,	3.09	1.05	39
28	Passes/tickets to nonacademic events like movies and exhibitions	2.78	0.96	46
29	Sports tournament fees/ tickets	2.98	1.06	41
30	Perceived value of the gift to patients as well as its monetary value.	2.90	0.90	43
31	Offers Electronic Appliances (T.V.,Laptop,A.C. etc.)	2.76	0.98	47
32	Offers Home Utensils	2.81	0.98	45
33	Dinner out	2.86	1.02	44
34	Spouse meal at Dinner out	2.93	1.05	42
35	Greetings on Birthday/ Anniversary /Festivals	3.38	1.06	32
36	The overall value receives from Medical rep./Company	3.44	1.00	29

Sr	Parameter	Mean	S.D.	Rank
37	Overall service efficiency receives from Medical rep./Company	3.63	0.86	18
38	Relationship maintain by Medical rep./Company	3.77	0.89	13
39	Ease of using catalogue	3.38	0.90	32
40	Product training provided	3.45	0.90	27
41	Attitude of specialists	3.58	1.01	22
42	Technical ability of specialists	3.85	1.05	9
43	Rapid solutions of customers problems	3.64	1.04	17
44	Availability of sales consultants/ specialists	3.59	0.91	21
45	Frequency of contact of sales consultants/specialists	3.50	0.93	24
46	Product knowledge of sales consultants/specialists	3.88	0.86	7
47	Ease of contacting customer service staff	3.69	0.95	15
48	Convincing power	3.48	1.05	25

Source: Field Data

Above table reveals that product available in different form (Tablet, Syrup, Injection) and available in different Size/Quantity (100ml, 200ml) were more affected on prescription behavior as having mean value 4.28 and 4.26 secures 1st & 2nd rank respectively. Followed to this practitioner prefer product quality, product by reputed brand, ease of product use for patient having ranks 3rd, 4th and 5th respectively. 36 variables receive mean value in between 3 to 4 it shows that practitioners are agree on these 36 variables are responsible for prescribing product. Remaining 6 variable received mean value less than 3 it means that this variables are not that much responsible for prescribing product the variables are sports tournament fees/ tickets, spouse meal at dinner out, perceived value of the gift to patients as well as its monetary value, dinner out, offers home utensils, passes/tickets to nonacademic events like movies and exhibitions, offers electronic appliances (T.V.,Laptop, A.C. etc.).

The detail analysis of aforesaid 48 parameters has undertaken in an independent section in this thesis using multivariate technique of analysis i.e. factor analysis.

After analysis it can conclude that as per the medical practitioners opinion product available in different form (Tablet, Syrup, Injection) and different size/quantity (100ml, 200ml) as well as quality more affect on prescribing product of any

company. Medical practitioners are also given preference to product by reputed branded company and ease of product use for patient. As per the Medical practitioners opinion offering electronic appliances, passes/tickets to nonacademic events like movies and exhibitions, home utensils, dinner out for individual as well as with spouse are not affecting on sale of particular product. Hence, it is found that Medical practitioners are more focus on product quality and its specification than promotional items.

Services and Facilities Received by medical Practitioners

Medical representatives have been using various tools to motivate physician to prescribe and sale the product. Researcher assess the opinions of medical practitioner regarding services and facilities received and the extent of satisfaction after receiving the services and facilities. Researcher has facilitated 17 parameters which are considered as tool for marketing of product. The scale for received level ranges 1for very poor and 5 for very good, for satisfaction level 1 for strongly dissatisfied and 5 for strongly satisfied. Mean, standard deviation and rank has been used for data analysis, the spearman's rank correlation also has calculated at 0.01 significance level to check the relationship between Services and Facilities Received by medical Practitioners.

Table: 2
Opinions of Medical Practitioner about Services and Facilities Received and Satisfaction after Receiving by them.

(n=103)

Sr.	Parameter	Received			Satisfaction		
		Mean	S.D.	Rank	Mean	S.D.	Rank
1	Schemes by Company/ Medical Representative	3.73	1.04	3	3.64	0.99	7
2	On time Delivery	3.77	0.84	1	3.81	0.94	1
3	Free Samples/ Drug Samples	3.55	1.04	7	3.55	0.94	10
4	Offering Pen	3.44	0.97	11	3.66	1.08	5
5	Offering Prescription Pad	3.64	0.91	5	3.61	1.07	8
6	Offering Stationary Material	3.51	0.97	9	3.38	1.04	16
7	Offering Books	3.41	1.03	12	3.52	1.01	11
8	Financial assistance for Research	3.09	0.91	15	3.40	1.13	13
9	Sponsorships to conduct academic events	3.01	0.93	16	3.31	1.05	17
10	Sponsorships to conduct campaigning for patients	2.99	1.01	17	3.43	1.08	12
11	Sponsorships to attain important conference for enhancement of knowledge	3.10	0.98	14	3.40	1.00	13
12	Instruments required for Daily practices & for to give good quality of service to patient	3.36	1.01	13	3.56	1.02	9
13	Regular calls/Meetings by Medical Rep.	3.50	0.98	10	3.68	1.00	4
14	Regular follow up and communication . of requirement by Medical Rep	3.69	0.92	4	3.70	0.96	2
15	Greetings on festivals/Birthday/Functions	3.53	0.96	8	3.39	0.94	15
16	Customized Product/service as per Requirements	3.62	0.94	6	3.65	1.05	6
17	Regular reminders of brands	3.74	0.99	2	3.70	0.96	2
	Spearman's Correlation Coefficient	.691					
	Sig. (2-tailed)	0.002					
	Correlation is significant at the 0.01 level (2-tailed).						

Source: Field Data

Entire parameters of services and facilities found received by physician since mean values ranges from 2.99 to 3.77 which is less than 4 but near to 3 it means that practitioners agree on that they are receiving promotional material. Samples were further asked about satisfaction on service and facilities reveals mean score ranging from 3.81 to

3.31 which shows that all samples are satisfied with variables standard deviation is ranging from 0.94 to 1.13 which shows little inconsistency in the opinions about satisfaction.

Above table reveals that there are different services and promotional items offered by medical

representatives to medical practitioners. As per the medical practitioners opinion on time delivery is very prompt by representative having mean value 3.77 with 0.84 Standard deviation and secures 1st rank. Followed to this practitioners received regular reminders of brands having mean value 3.74 with 0.99 standard deviation and secure 2nd rank. As mean value of Sponsorships to conduct campaigning for patients is 2.99 having 17th rank which shows that practitioners are not receiving this service by medical representatives.

The table also depicts the satisfaction of medical practitioners on services offered by medical representatives. Samples are satisfied with on time delivery having mean value 3.81 and secures 1st rank. Followed to this practitioners satisfied with regular follow up and communication of requirement by medical representative and regular reminders of brands having same mean value 3.70 and secure 2nd rank. Samples are not satisfied as compare to other variables with sponsorships to conduct academic events having mean value 3.31 and secure 17th rank.

The spearman's rank correlation coefficient is 0.691 at 0.01 significant level which shows the positive correlation between received and satisfaction level.

Findings:

As per the medical practitioners opinion offering electronic appliances, passes/tickets to nonacademic events like movies and exhibitions, home utensils, dinner out for individual as well as with spouse are not affecting on sale of particular product. Hence, it is found that medical practitioners have more focus on product quality and its specification than promotional items. Similar kind of finding drawn by Vishal et.al. (2010) that most doctors do accept gifts from pharmaceutical companies. The gifts reported to be accepted most frequently were of relatively lower cost like pens and pads. Certain gifts like direct cash and passes or tickets to non academic events were accepted by very few of them and were

considered unethical by most young graduates. As well as author also mention pharmaceutical companies and physicians have an interdependent relation. When physicians accept gifts from a drug company, there may be a conflict of interest between their duty to prescribe effective and affordable treatment to the patient and any obligation that they may feel to prescribe that company's drugs. The pharmaceutical industry has often been blamed for bribing doctors, the blame cannot be entirely apportioned to them as doctors do not necessarily view acceptance of gifts as unethical.

Medical practitioner are the part of prescriber so more agree on receiving on time delivery, regular reminders of brands, schemes by company/ medical representative regular follow up and communication of requirement by medical representatives. Similarly Melissa Clark (2011) mention that single most effective way that pharmaceutical companies can influence physician decisions is through the use of detailing by Pharmaceutical Sales Representative (PSRs). But medical practitioner do not agree on receiving sponsorships to conduct campaigning for patients, sponsorships to conduct academic events and financial assistance for research. medical practitioner are satisfied on delivery on time, regular follow up and communication of requirement by medical representatives, regular reminders of brands but less satisfied with sponsorships to conduct academic events. Spearman's rank correlation coefficient value between Services and facilities received is 0.691 at 0.01 level of significance. Signifies strong positive relationship between Services and facilities received.

Conclusion:

After the study it can be concluded that, as medical practitioner are the part of prescriber so more agree on receives on time delivery, regular reminders of brands, schemes by company/ medical representative regular follow up and communication of requirement by medical representatives. But medical practitioner are not agree on receiving sponsorships to conduct campaigning for patients, sponsorships to conduct

academic events and financial assistance for research. medical practitioner are satisfied on delivery on time, regular follow up and communication of requirement by medical representatives, regular reminders of brands but less satisfied with sponsorships to conduct academic events. The spearman's rank correlation coefficient shows the positive correlation between received and satisfaction level. Medical practitioners are satisfied on the services and motivation given by companies.

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Labour Migration in India : A Study

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Abstract:

Labour is an important factor of production in absence of which no single productive activity can be started. Labour may extend physical as well as intellectual services. But labour should get necessary and desirable employment opportunities at places they live. It is development activities that generate employment opportunities. It is a fact that economic development activities have been concentrated in urban areas and not in rural areas. Only agriculture and some allied activities have been located and developed in rural areas in the economy like India. Hence, migration is inevitable especially from rural areas to urban areas. This migration of labour has certain implications for the economy like India. Migration of labour can pose some problems like nature and extent of employment, physical or intellectual work, rates of wages, levels of income, provision of basic necessities of life, number of working hours, disposal of income, social security services, social services like education, health and medical, social status, political power etc. Labour migration has also dimensions like rural to urban migration, migration of male and female labours, migration of backward castes labour, causes of labour migration and so on. This demands an urgent need for studying the problem of labour migration. Its study has a social importance in the context of Indian economy especially in the post reforms era featured by decreasing importance of agriculture as a source of employment, domination of service sector in India's growth, greater employment in unorganized and informal sector, rising importance of private sector and private employment. It is against this overall background, the present research paper endeavours to study the problem of migration of labour with reference to India in general and Maharashtra in particular. The paper gives emphasis on studying important issues relating to migration of labour, which consist of nature and extent of labour migration in India, its urban-rural scenario, male-female dimension, labour migration among backward castes, related problems, implications for India, and policy guidelines to deal with problem of labour migration. The present study examines the problem of migration of labour with reference to India, with special emphasis on problem of labour migration in Maharashtra with special reference to Backward Castes (BCs) during the period from 1983-84 to 2007-08. The study, based on empirical analysis draws certain important implications for India, and also reveals some policy

guidelines to deal with the problem of labour migration. The study reveals implications that migration of labour is an important problem in India, which is of a peculiar nature and significant level. The nature and level of problem of labour migration differs across the states in our country. Labour migration also has gender and social stratification dimension. The number of causes is responsible for migration of labour. The prominent are economic

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causes for males, and marriage for females. The extent of labour migration among backward castes and their different categories is also significant one. Labour migration among backward castes has been exploiting them in many respects. This demands an urgent need to pay due attention towards the problem of labour migration in India. Hence, the present study gives the number of policy guidelines to deal with problem of labour migration. The noteworthy are rural economy oriented growth strategy, social security measures, necessary control of government, budgetary provisions, enactment and enforcement of laws and acts, and so on. The study also states that the number of studies on the problem of labour migration in various forms should be undertaken, which will provide inputs for policy formulation and implementation.

Keywords : Labour Migration, Nature and Extent of Migration, Gender Dimension, Urban-Rural Aspects, Policy Guidelines.

Introduction:

Labour is an important factor of production in absence of which no single productive activity can be started. Labour may extend physical as well as intellectual services. But labour should get necessary and desirable employment opportunities at places they live. It is development activities that generate employment opportunities. It is a fact that economic development activities have been concentrated in urban areas and not in rural areas. Only agriculture and some allied activities have been located and developed in rural areas in the economy like India. Hence, migration is inevitable especially from rural areas to urban areas. This migration of labour has certain implications for the economy like India. Migration of labour can pose some problems like nature and extent of employment, physical or intellectual work, rates of wages, levels of income, provision of basic necessities of life, number of working hours, disposal of income, social security services, social services like education, health and medical, social status, political power etc. Labour migration has also dimensions like rural to urban migration, migration of male and female labours, migration of backward castes labour, causes of labour migration and so on. This demands an urgent need for studying the problem of labour migration. Its study has a social importance in the context of Indian economy especially in the post reforms era featured by decreasing importance of agriculture as a source of employment, domination of service sector in India's growth, greater employment in

unorganized and informal sector, rising importance of private sector and private employment. It is against this overall background, the present research paper endeavours to study the problem of migration of labour with reference to India in general and Maharashtra in particular. The paper gives emphasis on studying important issues relating to migration of labour, which consist of nature and extent of labour migration in India, its urban-rural scenario, male-female dimension, labour migration among backward castes, related problems, implications for India, and policy guidelines to deal with problem of labour migration. Much of the earlier literature on migration has been preoccupied with 'development induced' economic migration, which resulted from unequal development trajectories (McDowell and De Hann 1997; Kothari, 2002).

This supposedly led to one way population movements from less endowed areas to well endowed prosperous areas through the 'push' created by poverty and a lack of work and the 'pull' created by better wages in the destination (Lee, 1966). The major objectives of present study are :To study nature and extent of migration of labour in India, To examine urban-rural dimension of labour migration in India, To highlight gender aspect of labour migration in India, To outline problems of labour migration among backward castes (BCs), To reveal implications conclusions and suggest policy guidelines to deal with problem of labour migration.

Research Methodology:

The present research study is an honest attempt to examine problem of labour migration in India, especially in the post reforms era. The study tries to assess labour migration in India by taking into consideration its nature, extent in India, across the states having rural- urban gender as well as backward castes dimensions. For this, the present study solely depends on the secondary data published by NSSO (National Sample Survey Organisation) rounds, NSS reports, Ministry of Labour, Government of India publications and others. The present study covers the latest period from 1993-94 to 2007-08, which is the post reforms period. The study uses parameters like number of households migrated, migration rate, inter state comparison, trends in labour migration among males - females, urban -rural areas, among backward castes, and others. The data is classified and tabulated in the light of objectives and hypotheses of the present study. The data has been processed by employing simple statistical tools like ratio analysis, growth rate, migration rates and others. The data is processed by using statistical tools like frequency distribution and percentage shares through Excel and SPSS computer software packages.

Results and Discussion: Empirical Analysis of Labour Migration in India

Studies on migration have been very few in India because historically speaking migration has never been considered an important demographic issue due to the small volume of internal migration relative to the total size of the population. (Bose, 1983). However, these small scale internal migrations within the sub continent were replaced by large scale external migration when the partition in 1947 created India and Pakistan. Withdrawal of the British from India and the partition were associated with a massive transfer of population estimated at 15.5 million between the short span of 1947-51 (Kosinski and Elahi, 1985). It is a fact that migration of labour takes place in India. It is significant and different across the states in India. It has also various issues and aspects in India. Hence, its study is of greater importance. We will begin with nature and extent of labour migration in India in the post reforms

era in India. The necessary statistical information is given in Table 1 below.

Table 1: Number of Labour Migrant Households in India and Across the States

State/U. T./ All India	Rural	Urban	Total
Andhra Pradesh	16	50	25
Arunachal Pradesh	39	42	50
Assam	12	60	18
Bihar	12	53	16
Chhattisgarh	19	37	22
Delhi	18	24	23
Goa	18	61	42
Gujarat	28	65	42
Haryana	3	20	18
Himachal Pradesh	50	53	50
Jammu & Kashmir	4	19	17
Jharkhand	8	34	13
Karnataka	10	45	22
Kerala	28	64	37
Madhya Pradesh	8	17	11
Maharashtra	16	29	22
Manipur	38	26	34
Meghalaya	5	11	16
Mizoram	9	32	19
Nagaland	14	61	26
Orissa	13	20	14
Punjab	14	28	19
Rajasthan	7	22	11
Sikkim	38	76	43
Tamil Nadu	15	28	20
Tripura	12	26	15
Uttarakhand	19	53	28
Uttar Pradesh	8	22	11
West Bengal	8	17	110
A & N Islands	42	47	44
Chandigarh	21	59	54
Dadra & Nagar Haveli	37	34	45

State/U. T./ All India	Rural	Urban	Total
Daman & Diu	13	9	11
Lakshadweep	77	113	94
Pondecherry	18	47	35
All India	13	33	19

Source : NSS Report 2007-08

The highly skilled Indians have migrated to the developed countries not only through the 'employment gate'; another stream of skilled migration has been taking place through the 'academic gate' as growing pools of revolving students formed a distinct set of actor amongst the Indian migrants the 'semi finished human capital' of Indian professionals abroad (Majumdar, 1994; Abella 2006). India has become a must destination for internationally renowned educational institutions shopping for knowledge capital, i. e. to woo the Indians student (The Hindu, November 26, 2000). In October 2000, four countries had named education fairs in Delhi and other Indian cities and since then it has become a regular feature of bilateral relations in India (Kludria, 2006). It is observed that at national level about 2% households migrate is no doubt considerable one. The migration of labour households is mainly for searching employment opportunities. The migration of labour is different across rural and urban areas in India, as well as across the states. The extent of labour migration households is significantly higher (3.3%) in urban area than (1.3% in rural area. A major number of labour migrant households is found in Lakshadweep, Chandigarh, Andhra Pradesh, Himachal Pradesh

and Dadra & Nagar Haveli. But minimum labour migration is found in Meghalaya, Jammu & Kashmir, Haryana, West Bengal. In urban area, maximum migration of labour households is found in Lakshadweep, Dadra & Nagar Haveli, Sikkim, Gujarat and Kerala, which are economically backward and also illiterate. But lowest labour migration is found in urban area of Daman & Diu, Meghalaya, West Bengal and Madhya Pradesh. In rural areas, Lakshadweep, Andaman & Nikobar Islands, Arunachal Pradesh, Sikkim, Manipur and Dadra Nagar Haveli are significantly ahead in the number of labour migrant households in India.

Migration rate is an indicator of migration of labours. This indicates the rate at which migration of labour is taking place. It can also differ across the states and for males and females. Table 2 represents the migration rate in India as well as across the states. There is a vast body of literature on migration, with interpretation from different disciplinary perspectives. Earlier analysis of migration were rooted in economic theory (Todaro, 1976) focusing on the rational behaviour of individuals. More recently economic theories have been broadened to accommodate transaction costs, imperfect information as well as imperfections in rural capital markets (Stark, 1980, 1991). These new economics of labour migration also recognised the household as the unit of decision making according to the incentives and constraints it faces. The new economics of labour migration framework of analysis (Taylor, 1991) addresses the multiplicity of factors, which underlie the decision to migrate, and the possible effects of migration on both migrant origin and destination economies.

Table 2: Migration Rate in India and Across the States

State/U. T./All India	Male	Female	Male + Female
Andhra Pradesh	155	471	314
Arunachal Pradesh	17	9	13
Assam	45	236	134
Bihar	31	390	204
Chhattisgarh	112	540	320

State/U. T./All India	Male	Female	Male + Female
Delhi	420	421	420
Goa	327	370	306
Gujarat	135	533	323
Haryana	106	588	330
Himachal Pradesh	181	594	391
Jammu & Kashmir	37	320	176
Jharkhand	39	313	172
Karnataka	140	443	289
Kerala	210	452	337
Madhya Pradesh	61	531	284
Maharashtra	205	540	367
Manipur	7	10	9
Meghalaya	38	32	35
Mizoram	143	164	153
Nagaland	121	148	134
Orissa	83	519	302
Punjab	124	569	334
Rajasthan	92	531	305
Sikkim	233	448	336
Tamil Nadu	121	338	232
Tripura	66	169	117
Uttarakhand	215	551	379
Uttar Pradesh	55	495	267
West Bengal	90	505	291
A & N Islands	510	552	529
Chandigarh	563	533	549
Dadra & Nagar Haveli	278	578	401
Daman & Diu	419	488	447
Lakshadweep	352	228	291
Pondicherry	176	383	277
All India	109	472	285

Source: NSS Report 2007-08

It is revealed that, labour migration rate is significantly higher (28.5%) at national level in India. It is significantly higher for females (47%) than males indicate greater mobility of the females. The rate of labour migration is significantly higher for the states of Haryana, Punjab, Dadra & Nagar Haveli, Andaman & Nikobar Islands, Chandigarh and Maharashtra, is a combination of backward and developed states. But in Arunachal Pradesh, Manipur, Meghalaya, Nagaland, Mizoram and Tripura are very much behind in female labour migration, which are mainly economically backward and less literate states.

The migration rate of male workers was high for the state Chandigarh, Andaman & Nikobar Islands, Delhi, Daman & Diu and Lakshadweep. It was significantly lower for Manipur, Arunachal Pradesh, Bihar, Jammu & Kashmir and Assam.

India is dominated by the rural economy. India's rural economy is dominated by agriculture as well as illiteracy. This demands to examine labour migration rate among males and females in rural India. The necessary data is presented in Table 3 below.

Table 3: Migration Rate for Rural India across the States in India

State/U. T./All India	Male	Female	Male + Female
Andhra Pradesh	88	473	282
Arunachal Pradesh	11	5	8
Assam	26	227	120
Bihar	12	379	189
Chhattisgarh	70	531	295
Delhi	282	407	339
Goa	120	296	212
Gujarat	53	572	299
Haryana	41	593	298
Himachal Pradesh	153	592	378
Jammu & Kashmir	24	329	174
Jharkhand	10	308	156
Karnataka	80	474	273
Kerala	195	459	333
Madhya Pradesh	30	533	268
Maharashtra	98	572	329
Manipur	6	5	6
Meghalaya	38	29	33
Mizoram	107	114	110
Nagaland	62	92	76
Orissa	43	511	280
Punjab	74	571	312
Rajasthan	46	541	288
Sikkim	195	414	300
Tamil Nadu	79	354	220
Tripura	57	163	110
Uttarakhand	151	539	344
Uttar Pradesh	26	501	256
West Bengal	45	512	272
A & N Islands	508	562	533

Chandigarh	710	628	672
Dadra & Nagar Haveli	237	566	372
Daman & Diu	484	536	503
Lakshadweep	320	239	281
Pondecherry	139	356	242
All India	54	477	261

Source : NSS Report 2007-08

It is revealed that labour migration for rural India is significant (26%).

But is significantly high for females (48%) than males is a clear indicator of higher mobility of females than males (5.4%). The rate of labour migration is higher for the states Chandigarh, Andaman & Nikobar Islands, Daman & Diu, Dadra & Nagar Haveli and Uttarakhand respectively. It is significantly lesser for Manipur, Arunachal Pradesh, Meghalaya, Nagaland and Assam. The rate of female labour migration is higher significantly in Chandigarh, Haryana, Himachal Pradesh, Punjab and Dadra & Nagar Haveli respectively. Likewise, Chandigarh, Andaman & Nikobar Islands, Daman & Diu, Lakshadweep and Delhi have higher rate of labour migration.

Marriage is a dominant factor in female mobility and due to the custom of marrying off women within the close circle, which does not normally involve long distance migration, we find 60 - 80% of migration taking place within the same district (K. Shanthi, 2006). Urban area of Indian economy is dominated by development of service and industry sector development. Hence, it is inevitable to examine labour migration rate in urban areas of India. The necessary data is presented in Table 4 below.

Table 4 : Migration Rate for Urban India and Across States

State/U. T./All India	Male	Female	Male + Female
Andhra Pradesh	333	467	400
Arunachal Pradesh	38	27	33
Assam	223	327	270
Bihar	208	497	345
Chhattisgarh	330	590	452
Delhi	431	422	427
Goa	323	429	377
Gujarat	276	465	365
Haryana	279	576	417
Himachal Pradesh	455	618	532
Jammu & Kashmir	97	281	186
Jharkhand	178	341	253
Karnataka	265	383	324
Kerala	258	428	348
Madhya Pradesh	160	523	336
Maharashtra	356	493	421
Manipur	10	26	18
Meghalaya	42	47	44

State/U. T./All India	Male	Female	Male + Female
Mizoram	189	223	206
Nagaland	320	329	325
Orissa	324	567	442
Punjab	223	565	379
Rajasthan	240	495	362
Sikkim	536	729	627
Tamil Nadu	176	316	247
Tripura	112	201	156
Uttarakhand	397	594	486
Uttar Pradesh	165	471	310
West Bengal	233	482	353
A & N Islands	513	530	521
Chandigarh	544	521	533
Dadra & Nagar Haveli	528	656	579
Daman & Diu	254	406	323
Lakshadweep	392	215	303
Pondecherry	206	402	305
All India	259	456	354

Source : NSS Report 2007-08

It is observed that rate of labour migration for urban India is significantly (35%) higher. It is higher significantly for urban females (46%) than males (26%). Migration of labour is higher for Sikkim, Dadra & Nagar Haveli, Chandigarh, Himachal Pradesh and Andman & Nikobar Islands respectively, are prominently less developed states. But it is lesser for Manipur, Meghalaya, Arunachal Pradesh, Meghalaya, Tripura and Assam respectively. So far as migration rate among females is concerned, Sikkim, Dadra & Nagar Haveli, Himachal Pradesh, Orissa and Uttarakhand are significantly ahead. For males, migration rate is greater in Chandigarh, Sikkim, Dadra & Nagar Haveli, Himachal Pradesh and Delhi respectively. Labour migration rate can change with passing of time. Hence, it is important to examine trends in the rate of labour migration in India coupled with gender dimension. Table 5 represents the data relating to changes in rate of labour migration in India.

Table 5: Changes in Labour Migration Rate in India

Round (Year)	Category of Persons					
	Rural			Urban		
	Male	Female	Total	Male	Female	Total
38th 1973	72	351	209	270	366	316
43rd 1987-88	74	398	232	268	396	329
49th 1993	65	401	228	239	382	307
55th 1999-2000	69	426	244	257	418	334
64th 2007-08	54	477	261	259	456	354
SGR	- 25%	36%	25%	- 4%	25%	12%

Source : NSS Report 2007-08

SGR = Simple Growth Rate

It is revealed that the rate of labour migration was higher for urban area than rural area. But it rose rapidly in rural area (95%) than in urban India (12%). It is also observed that female labour rate of migration was high in urban India than rural India. It is high for both rural as well as urban areas, as far as their growth rates are concerned. But it is high (36%) for rural females than urban females (25%). The noteworthy thing is that, rate of male as well as female labour migration has decreased during the period under study. And the decrease is very rapid for male rural labours than male urban labours, indicates a fall in mobility of males coupled with employment generation there only.

It is a fact that problem of migration of labour is an important labour problem in India. The question arises is, what can be responsible causes for labour migration in India? The necessary information about that is given in Table 6 below. As expected migration rates were extremely high from villages, which were remote and located in dry areas without assured irrigation and prolonged drought conditions. But these figures masked the fact that quite a lot of this migration from drought prone areas was along old and established routes, which although precipitated due to a 'push' of some kind have now become regular and accumulative paths to engaging in high return labour markets (Deshingkar and Start, 2003).

Table 6 : Causes of Labour Migration in India

Reason for Migration	Migrated in Rural Areas		Migrated in Urban Areas	
	Male	Female	Male	Female
49th Round (1993)				
Employment related reasons	477	83	415	49
Studies	41	11	180	70
Marriage	23	616	9	317
Movement of Parents/Earning Member	208	327	283	493
Other Reasons (incl. n. r.)	251	53	113	69
All	1000	1000	1000	1000
55th Round (1999-2000)				
Employment related reasons	303	10	519	30
Studies	53	4	62	13
Marriage	94	888	16	585
Movement of Parents/Earning Member	260	63	270	310
Other Reasons (incl. n. r.)	290	35	133	62
All	1000	1000	1000	1000
64th Round (2007-08)				
Employment related reasons	286	7	557	27
Studies	107	5	68	22
Marriage	94	912	14	608
Movement of Parents/Earning Member	221	44	252	294
Other Reasons (incl. n. r.)	292	32	109	49
All	1000	1000	1000	1000

Source : NSS Report, 2007-08

It is observed that number of reasons is responsible for labour migration in India. The noteworthy are employment, studies, marriage, movement of parents and earning member and others. The data in Table 6 reveals that self-employment is a major cause of migration for males than females during the period 1993-94 to 2007-08. It is true in the case of both rural as well as urban area in India. It is increasing in urban areas, but falling in rural areas during the period into consideration. It is followed by movement of parents/earning member and others as causes of labour migration in India. The further and in-depth study of migration of labour in India highlights number of causes contributing to migration of labour in our country, especially in the economic reforms era. Table 7 below depicts the necessary information about that.

The study reveals that employment related causes are a prominent reason responsible for labour migration in rural, urban as well as total migration especially for males. In employment related causes the prominent causes are search of better employment, search of employment, take up employment/better employment among males in rural as well as urban areas. Studies also are helping in migration more importantly for males and in rural area. Forced migration due to natural disaster, social/political problem, displacement is also a cause of migration, but not a significant cause. Marriage is an important cause of migration for females both in rural as well as urban areas. Migration of parent earning family member is also a significant cause of migration for males and females, but it is more important for males in rural area.

Table 7 : Detailed Study of Causes of Labour Migration in India

Sr. No.	Reason for Migration	Rural			Urban			Rural-Urban		
		Male	Female	Person	Male	Female	Person	Male	Female	Person
	Employment related reasons									
1	In search of employment	46	1	6	151	6	61	112	3	24
2	In search of better employment	96	2	12	165	6	66	139	3	30
3	Business	17	0	2	30	1	12	25	0	5
4	To take up employment/ better employment	81	2	10	133	9	56	114	3	25
5	Transfer of service/ contract	36	1	4	68	3	28	56	1	12
6	Proximity to place of work	10	1	2	10	2	5	10	1	3
7	Sub Total (Sr. No. 1 to 6)	286	7	36	557	27	228	456	11	99
8	Studies	107	5	16	68	22	40	82	10	24
	Forced Migration									
9	Natural disaster	12	1	2	2	1	1	6	1	2
10	Social/ political problem	24	2	5	7	3	4	13	2	5
11	Displacement by development projects	6	0	1	4	1	2	5	1	1
12	Sub Total (Sr. No. 9 to 11)	42	3	8	13	5	7	24	4	8
13	Acquisition of own house/ flat	42	3	7	34	9	18	37	4	11
14	Housing problems	39	3	7	16	6	10	24	4	8
15	Health carte	11	1	2	4	2	2	7	1	2
16	Post retirement	26	0	3	7	0	3	14	0	3
17	Marriage	94	912	825	14	608	383	44	836	681

Sr. No.	Reason for Migration	Rural			Urban			Rural-Urban		
		Male	Female	Person	Male	Female	Person	Male	Female	Person
18	Migration of parent/earning member of the family	221	44	63	252	294	278	241	107	134
19	Others	122	17	28	34	22	26	66	18	27
20	Sub Total (Sr. No. 13 to 19)	555	980	935	361	941	720	433	970	866
21	All (incl. n. r.)	1000	1000	1000	1000	1000	1000	1000	1000	1000

Source : NSS Report, 2007-08

Labour migration in India has a dimension of social stratification.

The trends in labour migration among different social groups in India are illustrated in Table 8 below.

Table 8: Labour Migration among Different Social Groups in India

Social Group	Rural			Urban			Total		
	1993	2007-08	SGR	1993	2007-08	SGR	1993	2007-08	SGR
ST	27	19	-30%	29	62	114%	27	23	- 93%
SC	9	11	22%	21	28	33%	11	14	27%
OBC	-	12	-	-	34	-	-	17	-
Others	9	15	67%	23	33	43%	13	22	162%
All	11	13	18%	22	33	50%	14	19	36%

Source : NSSO 49th Round 1993 & 64th Round 2007-08

Note : Number of households per 1000 households

SGR = Simple Growth Rate

It is revealed from the data results in Table 8 that migration among STs has decreased significantly during the period into consideration may be due to getting stability. But it has decreased in rural areas, and increased rapidly in urban areas because of availability of employment opportunities. Migration among (Scheduled Castes) SCs has rose significantly in all situations is a thing of concern. Migration among OBCs is decreasing. For others, migration is increasing significantly in all situations, i. e. Total, Rural and Urban.

Migration rate is an important indicator of migration. Hence, it will be of vital importance to assess migration rate for different social groups in India to highlight intensity of the problem of labour migration. Table 9 represents the data about that.

Table 9: Migration Rate for Different Social Groups in India

Social Group	Category of Persons					
	Rural			Urban		
	Male	Female	Total	Male	Female	Total
1999-2000 55th Round						
ST	56	357	204	282	411	245
SC	64	434	244	225	393	305
OBC	65	428	242	237	413	323

Social Group	Category of Persons					
	Rural			Urban		
	Male	Female	Total	Male	Female	Total
1999-2000 55th Round						
Others	81	443	259	276	426	347
All	69	426	244	257	418	334
64th Round 2007-08						
ST	47	440	238	288	430	356
SC	49	482	260	235	447	337
OBC	51	468	255	230	437	331
Others	68	506	281	290	477	379
All	54	477	261	259	456	354

Source: NSSO 55th and 64th Rounds

The information in Table 9 reveals that rate of migration is higher for STs in rural as well as urban area of India especially for females, and it is increasing. Rate of migration is ore significant for SCs, and it is increasing except for rural males. Migration rate is also significant for OBCs in rural as well as urban areas in India except for rural males during the period into consideration. For others, migration rate also significant and increasing during the same period except rural males. It is migration among males, is for employment causes, is a noteworthy thing. Rate of migration among males in urban areas among different social groups is high and rising is a thing of serious concern. A large cost in migration is the search cost and moral hazard of being cheated. Migration options become more and more secure, and thus attractive over time. For those who have risk and going to find new opportunities and have maintained the link, the investment often pays off (Deshingkar and Start, 2003).

Major Conclusions and Policy Guidelines:

The thorough study of problem of migration of labour in India during the latest period from 1983-84 to 2007-08 with emphasis on its various issues and aspects reveals some important conclusions relating to labour migration in India.

Labour migration is a significant problem at national level. No doubt, its level is significant,

hence considerable. The extent of migration of labour differs across the states in India. It is indicated by both number of households migrated as well as migration rate. The states, which have higher migration rates, are basically economically less developed such as Dadra & Nagar Haveli, Daman & Diu, Andman & Nikobar Islands, and Uttarakhand. The extent of migration of females is significantly higher than males, mainly due to their marriages in the states like Dadra & Nagar Haveli, Chandigarh, Haryana, Himachal Pradesh, Punjab. The magnitude of male migration is higher in a few states like Chandigarh, Andman & Nikobar Islands, Daman & Diu, Lakshadweep and Delhi, which are economically underdeveloped states except Delhi. The rate of migration also differs for rural and urban area in India. In urban areas, the rate of migration is higher for both females as well as males due to economic reasons mainly. In rural areas rate of migration is higher for females than males because of non-economic causes like marriages. It is a fact that the number of causes is responsible for labour migration in India. It is the migration of males that takes place due to reasons relating employment like search of employment, search of better employment, take up employment/better employment and migration of parent/earning member. The prominent cause of female migration is marriage. This is an indicator of higher mobility of males and their

efforts to grab employment opportunities. It is also necessary to mention that male migration in urban area is rapid than rural areas. It is also revealed that labour migration is significant and increasing among different categories of backward classes, which is high for males in urban areas than females due to economic reasons. In rural areas they are engaged in their traditional occupations or agriculture.

It is revealed that the problem of migration of labour in India is severe having various dimensions like rural-urban, male-female, backward castes and others, etc., hence it is necessary to pay due attention for its solution. The major policy guidelines could be rural economy centred development strategy attempting for development of agriculture as well as non-agriculture activities. There is an urgent need for government control over unorganised and informal sector, which exploits labours and major migration of labours participation is in unorganised employment. The efforts should be made by the government to provide social security services to labours engaged in unorganised sector, which are mainly migrated labours. The emphasis should be given on providing social services like education, health, housing, water supply to the migrated labours especially in urban areas, because they are living in slums without basic amenities. The participation of females is comparatively lower in migrated labours; they should be given priority necessary for social justice and gender equality. Backward castes are the important victims of labour migration. They are facing number of important problems. The government should deal with their problems on priority basis to establish and promote social justice. A separate labour policy for migrated labours should be formulated and implemented which will deal with their problems. The union as well as state governments should made provisions of funds in their budgets to provide necessary social services and financial assistance during emergency. A separate labour commission should be appointed to study problems of migrated labours and their solutions.

The migrated labours should be given legal security by enacting acts, laws and making provisions therein relating their problems. Local governments should pay due attention towards migrated labours by undertaking certain duties and functions of their welfare.

Concluding Remarks:

Labour migration is an important labour problem in India, which has severe consequences and important implications for India. Migrated labours have been facing number of severe problems. Their urgent solution is need of the hour. The problem of labour migration has various issues and aspects, which cannot be taken upon in a single research paper. It is necessary to take up number of research studies in the form of research projects, research for Ph.D. and M. Phil. Studies, and research papers especially based on field survey and primary data. The present research paper is a little bit attempts in that direction. Such efforts will study various issues relating to labour migration in India, and will provide necessary inputs to government, decision makers and policy makers to formulate a comprehensive policy to deal with their problems and maximisation of welfare.

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Buying Behavior of Online Buyers With Respect to Flipkart Website

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Abstract:

Although online shopping has increased exponentially in recent years, very little is known about the factors that affect the selection decision. This research work attempts to find out factors that affect online buyer to select respective website for online shopping. As buyers are important aspect of marketing it is essential that factors which appeals them most must be identified and try to provide that so that respective profit can be incurred. Instrument is executed on 150 samples in Satara city, to find out influencing factors using factor analysis. Result of the research indicates Customer Service is the most important influencing factors that attract online consumers to select website to shop online. Reliability, usefulness and trust on website are other factors that affect the decision of website selection. Regarding products which preferred by online buyers are clothes and Mobile accessories.

Keywords: Website Trust, Website Design, Online Buying.

Introduction :

Over the years the evolution of the internet as a marketing medium has become a global phenomenon, leading to a rapid escalation of e-commerce in the past decade. The rise in the number of households possessing computers and the ease of internet access has led to this widespread acceptance of B2C e-commerce. Globalization brings quick and rapid access of all

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things around the world. In today's modern era, people don't have much time to visit at various showrooms and made shopping. This problem was solved by the E-shopping. It is a concept of electronic shopping means doing shopping using internet from anytime, anywhere. Now a day's number of website are busy in providing better service to customer. That website implement no of strategies to attract the attention of customers to maximize the sale. Flipksrt is one of the web sites which try to provide better service to online buyers. It is established in 2007 by the Founders: Sachin and Binny Bansal. With initial investment: 4 lacs. Headquarters of flipkart is at Bangalore. It started selling books online. Today more than 15 categories of products are there and having Revenue more than Rs 500 crore.

Literature Review:

A plethora of search scholar studied on the online shopping at national and international level. Adoption of online shopping still observed on

nascent stage especially in developing nations. The researchers seem to take different perspectives and focus on factors in different ways.

Researchers have tried to probe in association of online shopping with different characteristics of online buyers viz. demographic profile, psychographic profile etc.

Researcher has attempted contextual review of articles published in international, national and regional research journals. Most of these studies have attempted to identify factors influencing online shopping attitude and behavior; few of them also focus their attention on demographic difference in online shopping behavior.

Buyer's behavior is influenced by varieties of factors. Again different behavior is observed at different situation. (Nabil Tamimi, 2004) observed the speed of Internet connection was dependent of the frequency of online shopping. The results demonstrate that higher frequency of online shopping is associated with "broadband" connections. Internet experience and frequency of online shopping are independent of each other. While (Syed Shah Alam, 2008) observed user who having their own Internet connection at home lead to the active usage of Internet whereby the average time spend is more than 2 hours. Researcher concluded that young students online purchase will influenced by good web site design. They also opine that reliability of website of e-retailers, service provided to customers and trust was highly influenced online buying. Similar opinion is given by (Gerald L. Lohse, 1999) that the longer the amount of time spent online, the greater the chance of making a purchase online. The number of email messages per day had the next largest effect on buying behavior. Receiving more email messages is associated with a higher proclivity to buy online.

(Jarvelainen, 2003) opine that Perceived ease of-use was considered the most important element of the perceived usefulness and Ease of-use construct. He also opines that experience mainly influences intention and behaviour directly, but also indirectly, mostly through perceived ease-of-

use. Similar opinion is observed by (Aron O'Cass, 2003) opine that two constructs, perceived usefulness and perceived ease of use mediate all external variables likely to influence an Internet user's (consumer's) decision to use the WEB for purchases. Also perceived usefulness and ease of use were argued to influence attitude towards the WEB for retailing, and that, attitudes influences actual behaviour (adoption versus non-adoption) of using the WEB for retail purchases. The results here indicate that the antecedents (Opinion Leadership, Impulsiveness, Shopping Orientation, Web Shopping Compatibility, Internet Self-Efficacy, Perceived Web Security, Satisfaction with Websites) differentially affects Internet users beliefs (perceived usefulness of the WEB for retail purchases and perceived ease of use of the WEB for retail purchases. Somewhat similar opinion is observed by (Georgd, 2004) that internet trustworthiness beliefs had a significant impact on attitudes. Also they give vital importance to that point that organization should not use online buyer's personal information without their permission as it negatively affect the frequency of online buying. Attitudes toward Internet purchasing, in turn, affected actual purchasing behavior. Again while talking about perceived usefulness it is observed by (Kuo-Wei Su, 2009) that online shoppers' trust in sellers is positively associated with perceived usefulness, and perceived usefulness is positively associated with their repurchase intentions. Perceived behavioural control is found not to have positive influence on actual online purchasing. This would imply that the internet users will not purchase online unless they are provided with the necessary infrastructures and training involved in actual online purchasing. (Mat, 2009)

When it comes to talk on the effects of shopping orientation and online trust of online consumers it is observed by (Kwek Choon Ling, 2010) male respondents as compare to female are having large in number again most of respondent from 21-23 age group again when it comes to talk on online buying, the research concludes that an

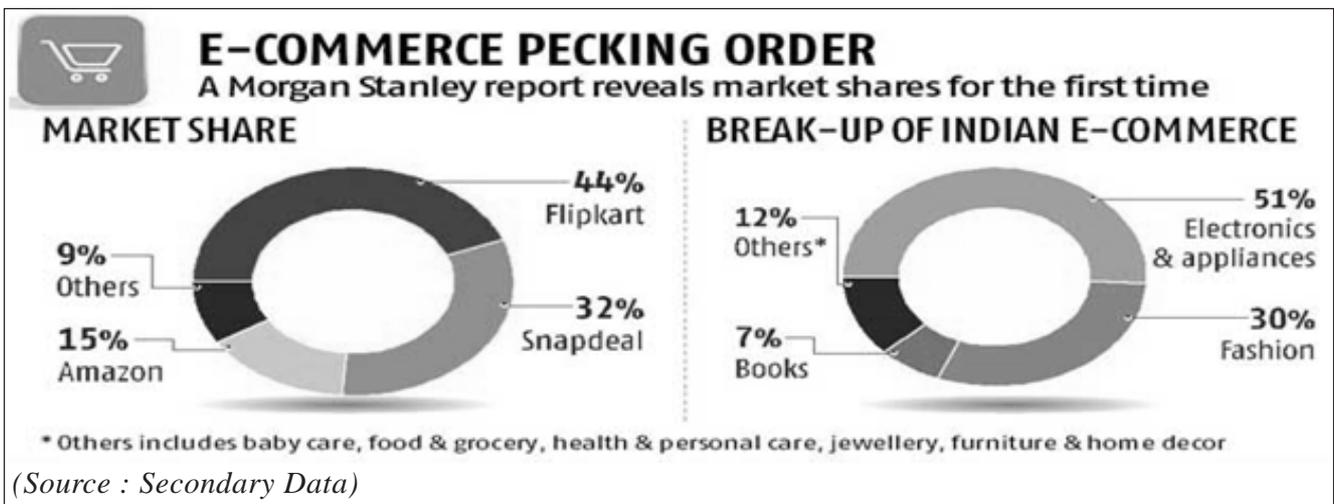
impulse purchase orientation is positively related to the customer online purchase intention., it can be suggested that quality orientation is positively related to the customer online purchase intention. (Yun Wan, 2008) and (Ganguly, 2010) opines that online purchase intention is primarily predicted by trust in the company. They also argues that purchase intention is primarily predicted by usefulness and ease-of-use of the e-commerce website. It is observed that trust in online stores is one of the key obstacles of online transactions. Again website design factors, which constitute the drivers of trust, eventually contribute to online purchase decision. Online stores should use effective implementation of website design factors such as information design, visual design and navigation design as marketing tools by which trust in the website can be created and subsequently, purchase intention can be enhanced. It is observed that trust in online stores is one of the key obstacles of online transactions. In order to operate a successful e-business, an online company requires a deep understanding of how trust is developed and how it affects purchase intention in online stores. It is opine that website design factors, which constitute the drivers of trust, eventually contribute to online purchase decision. Online stores should use effective implementation of website design factors such as information design, visual design and navigation design as marketing tools by which trust in the website can

be created and subsequently, purchase intention can be enhanced. (Ganguly, I2010)

(Archana Shrivastava, 2011) It is concluded that the motivation to buy online exhibits positive correlation to Convenience based Pragmatic Motivation, Time and Efforts based Pragmatic Motivation, Search and Information based Pragmatic Motivation, Product Based Motivation, Economic Motivation, Service Excellence Motivation, Situation and Hassle Reducing Motivation, Demographic Motivation, and Social and Exogenous Motivation have a significant influence on people's intention to reserve railway tickets online in India. Similarly (Rastogi, 2010) observed that ratio of male consumers is very high in online shopping. Regarding awareness of online shopping 100% awareness was observed. Employees of various companies are purchasing more than others through online shopping. Maximum numbers of respondents prefers online shopping due to number of reason such easy buying procedures, wide variety of products, Lower price of the products, various modes of payments etc. Most of the respondents think that Availability of online information's about Product & Services is excellent. Most of the respondents Search and buy online but pay in cash on delivery

The present paper makes a contribution to the existing literature by further extending findings from previous studies.

Research Methodology:-



For Flipkart, 34 per cent of its gross merchandise value (GMV) as of 2014 is estimated to come from electronics, followed by clothes, at 30 per cent. For Snapdeal, too, electronics and fashion are the two biggest verticals, with both expected to end this year with GMV worth \$5 billion and \$2 billion.¹ Flipkart and Snapdeal are among the most funded companies in Indian e-commerce. While Flipkart raised \$2 billion last year, Snapdeal got funds worth over \$1 billion. Both companies are seeking even more funds from investors. As for Amazon, it is believed to have been in talks with fashion portal Jabong, but the deal has not gone through yet, with investors of both the companies getting stuck over a number of issues for the time being, it is learnt.

The said facts pave various questions in researcher mind like -

While selecting website which factors may affect consumers most?

Is there any difference between male and female buyers while selecting website?

What are the driving motives which influence them to select respective website while shop online?

Hence researcher intends to study that factors which affect selection of website with respect to flip kart.

The objectives behind study were to find out factors influencing while selecting website for online buying. 150 samples who reside in Satara city of Maharashtra State, India are selected for study using convenient sampling method. Data is collected in November and December months of year 2015. Data was collected through schedule which is divided into three parts. All variables in Schedule were considered after review of literature on online shopping by various researchers, including (Archana Shrivastava, 2011) , (Dianne Cry, 2005) and (Yun Wan, 2008)

The first part of schedule includes variables that provide demographic details of samples which are

¹ http://www.business-standard.com/article/companies/flipkart-has-biggest-piece-of-indian-e-tail-pie-115032100041_1.html

developed by the researcher. In second parts variables which provides online buying pattern were asked. In third part factors which affecting website selction while online buying behavior were asked on five point likert type scale. All those factors were taken from caparing review of various authors viz. (Archana Shrivastava, 2011) , (Dianne Cry, 2005) and (Yun Wan, 2008)

Collected data was analyzed using Mean, Percentage and factor analysis.

Data Analysis:-

Table 1 Gender wise classification

Sr. No.	Gender	Frequency	Percentage
1	Male	125	83.33
2	Female	25	16.67
3	Total	150	100

Source: (Compiled by Researcher)

Above table shows that maximum i.e. 83.33% respondents are male and very few i.e. 16.67% respondents are female.

Table No. 2 Marital Status

Sr. No.	Marital status	Frequency	Percentage
1	Single	121	80.66
2	Married	28	18.66
3	Married & Divorced	1	0.66
4	Total	150	100

Source: (Compiled by Researcher)

Above table shows that maximum i.e. 80.67% respondents are single, 18.67% respondents are married and very few i.e. 0.67% respondents are married and divorced.

Table No. 3 Age

Sr.No.	Age	Frequency	Percentage
1	18-23	96	64
2	23-29	29	19.33
3	29-35	8	5.33

Sr.No.	Age	Frequency	Percentage
4	35-41	5	3.33
5	41-47	1	0.67
6	47-53	8	5.33
7	53-59	2	1.33
8	59-65	1	0.67
9	Total	150	100

Source: (Compiled by Researcher)

Above table shows that maximum i.e. 64% respondent belongs to 18-23 age group, 19.33% customers belongs to 23-29 age group.

Table No. 4 Qualifications:

No.	Qualification	Frequency	Percentage
1	SSC/HSC	1	0.67
2	Some college but not Graduate	119	79.33
3	Graduate/ PG Professional	9	6
4	Graduate/ PG General	21	14
5	Total	150	100

Source: (Compiled by Researcher)

Above table shows that maximum i.e. 79.33% respondent are still studying in some college but not graduate, 14% respondent completed their Graduation/Post Graduation in general course 6% respondent completed their Graduation/Post Graduation in professional course and very few i.e. 0.67% respondent had completed their SSC/HSC.

Table No 5 Frequency of online shopping

Sr No	Frequency of online shopping in last year	Frequency	Percentage
1	One to Five	107	71.33
2	Six to Ten	40	26.67
3	More than ten	3	2.00
4	Total	150	100.00

Source: (Compiled by Researcher)

Above table shows that maximum i.e. 71.33% respondent did online shopping 1-5 times in last one year, 26.67% respondent did online shopping 6-10 times in last one year and very few i.e. 2% respondent did online shopping more than ten times in last one year.

Table No 6 Products preferred to shop online by Flipkart website.

Sr. No	Product	Frequency	Percentage
1	Groceries	58	38.67
2	Clothes	142	94.67
3	Home Appliances	73	48.67
4	Electronic Gadgets	116	77.33
5	Auto Vehicle Accessories	51	34.00
6	Mobile Accessories	131	87.33
7	Books	75	50.00
8	Musical Instruments	36	24.00

Source: (Compiled by Researcher)

Above table shows that Maximum i.e. 94.67% respondent preferred to shop Clothes online by Flipkart website, 87.33% respondent preferred to shop Mobile Accessories online by Flipkart website, 77.33% respondent preferred to shop Electronic Gadgets online by Flipkart website, 50% respondent preferred to shop Books online by Flipkart website, 48.67% respondent preferred to shop Home Appliances online by Flipkart website, 38.67% respondent preferred to shop Groceries online by Flipkart website, 34% respondent preferred to shop Auto vehicle accessories online by Flipkart website and very few i.e. 24% respondent preferred to shop Musical Instruments online by Flipkart website.

Factor Analysis:-

Factor analysis is done to know the factor that influence online buying. The KMO and Bartlett's Test is performed to check the significance of variables to perform factor analysis.

Table No 7: Factors That Influence Shoppers To Buy Online:-**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.638
Bartlett's Test of Sphericity	Approx. Chi-Square	851.855
	Df	171
	Sig.	.000

Source: (Compiled by Researcher)

Above table reveals high value of KMO i.e. 0.638 It indicates that the data is useful for factor analysis and is significant at 99% confidence level.

Factor Extraction Table:-

The factors are extracted initially using principal component analysis and later using rotation matrix. Four factors were extracted which explains 69.438 percentage of variability. Factor one has extracted about 19.19% of information. In all seven factors can be extracted which explains role of 20 variables that influence online buyer to buy online. These seven factors details are as

Table No 8: Total Variance Explained:

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.648	19.198	19.198	2.511	13.217	13.217
2	2.304	12.124	31.323	2.021	10.637	23.854
3	1.996	10.503	41.826	1.869	9.834	33.688
4	1.535	8.077	49.903	1.807	9.512	43.200
5	1.385	7.287	57.190	1.765	9.290	52.491
6	1.230	6.472	63.662	1.686	8.872	61.363
7	1.097	5.776	69.438	1.534	8.075	69.438

Extraction Method: Principal Component Analysis.

Following tables shows that variables which affect online buyers to buy product and services online of all 150 online buyers Rotated Component Matrix method is used as follows.

Table No 9:**Rotated Component Matrixa**

Sr.	Variables	Component						
		1	2	3	4	5	6	7
1	F1	.052	.041	.859	-.003	.179	-.030	.094
2	F2	.117	-.044	.887	.012	.077	.037	.118
3	F3	.054	.105	.274	.062	.786	-.007	.112
4	F4	.074	-.126	.026	-.111	.821	.211	-.018

Sr.	Variables	Component						
		1	2	3	4	5	6	7
5	F5	.108	.079	.047	.227	.377	.740	.018
6	F6	-.028	.032	-.100	-.056	-.006	.817	.150
7	F7	-.100	.433	.325	.192	-.003	.543	.034
8	F8	.052	.844	-.032	-.088	-.095	.121	.004
9	F9	.257	.506	.199	.496	.066	-.106	-.002
10	F10	.226	.242	.099	.573	.173	-.097	-.106
11	F12	.773	.138	-.058	.027	.173	-.117	.026
12	F13	.874	-.037	.051	-.011	-.042	.077	.155
13	F14	.725	-.007	.238	.054	-.182	.035	-.139
14	F15	.054	-.019	-.043	.678	-.170	.216	.013
15	F16	-.087	-.065	-.049	.763	.016	.062	.290
16	F17	.033	.191	.049	.124	-.085	.115	.784
17	F18	-.027	.006	.169	.028	.160	.060	.818
18	F19	.043	.835	-.047	.125	.077	.075	.213
19	F20	.664	.102	.006	.197	.344	.027	-.078

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Source: (Compiled by Researcher)

Above table reveals the factor analysis after applying Varimax rotation. Seven factors are extracted. The factors are labeled and presented below reflecting the sentences.

Following table depicts four statements revealed the factor Customer Service for online websites.

Table No 10 Customer Service

Sr.	Statement	Factor Loading
1	The company is willing and ready to respond the customer needs.	.773
2	Inquiries are answered promptly.	.874
3	When you have a problem, the website shows a sincere interest in solving it.	.725
4	Good navigation facilities	.664

Source: (Compiled by Researcher)

Factor one labeled as Customer Service, as it loaded on first 4 variables. As shown above all are associated with convenience variables which provide better service to customer therefore it is labeled as 'Customer Service'. it include variables viz. company is willing and ready to respond the customer needs, Inquiries are answered promptly, When you have a problem, the website shows a sincere interest in solving it, Good navigation facilities provided by website.

Following table depicts three statements revealed the factor Reliability of web site.

Table No 11: Reliability

Sr.	Statement	Factor Loading
1	The level of personalization at this site is about right, not too much or too little.	.844
2	The product that came was represented accurately by the website.	.506
3	The interactions with the website are clear and understandable	.835

Source: (Compiled by Researcher)

Second factor extracted Reliability is determined by the level of personalization at web site is about right, not too much or too little, interactions with the website are clear and understandable and the product that came was represented accurately by the website, so it is labeled as 'Reliability'.

Following table depicts two statements revealed usefulness of website related variables of online samples.

Table No 12: Usefulness

Sr.	Statement	Factor Loading
1	It is quick and easy to complete a transaction at this website	.859
2	This site has competitive prices.	.887

Source: (Compiled by Researcher)

Third Factor extracted is usefulness of website related variables of online samples, as website provide quick and easy service to complete transactions also provide competitive price, hence it is labeled as 'Usefulness'.

Following table depicts three statements revealed Trust/ Transaction security of website related variables of online samples.

Table No 13: Trust/ Transaction security

Sr.	Statement	Factor Loading
1	You get what you ordered from this website.	.573
2	I feel safe in my transactions with this website.	.678
3	This website has adequate security features.	.763

Source: (Compiled by Researcher)

Fourth Factor extracted is Trust/ Transaction security of website related variables of online samples, as website provide adequate security features, customers orders was promptly fulfilled and transactions with this website are safe hence it is labeled as 'Usefulness'.

Following table depicts two statements revealed satisfaction of website related variables of online samples.

Table No 14: Satisfaction

Sr.	Statement	Factor Loading
1	This website has a good selection.	.786
2	This website understands my needs.	.821

Source: (Compiled by Researcher)

Fifth factor extracted is Satisfactory of customers related to website of online samples, as website has a good selection, customers needs was promptly fulfilled and transactions with this website are safe hence it is labeled as 'Usefulness'.

Following table depicts three statements revealed Web site design related variables of online samples.

Table No 15: Web Site Design

Sr.	Statement	Factor Loading
1	The website provides in depth information.	.740
2	I feel comfortable in surfing this site.	.817
3	The site doesn't waste my time.	.543

Source: (Compiled by Researcher)

Sixth factor extracted is Web site design related variables as website provides in depth information, comfortable in surfing this site and web dosent west time hence it is labeled as 'Web site design'.

Following table depicts two statements revealed Prompt service related variables of online samples.

Table No 16: Prompt Service

Sr.	Statement	Factor Loading
1	I feel that my privacy is protected at this site.	.784
2	The products or services I ordered were delivered to me within the time promised.	.818

Source: (Compiled by Researcher)

Seventh factor extracted is Prompt Service related variables as website provides product and services to the customers within promised period and customer's provacy was peotected by the web site hence it is labeled as 'Prompt Service'.

Findings:

It is found that maximum i.e. 83.33% respondent are male and very few i.e. 16.67% respondent are female. (Refer Table 1)

It is observed that maximum i.e. 80.67% respondent are single, 18.67% respondent are married. (Refer Table 2)

As online shopping is emerging concept it shows that young generation is leading it. Out of all respondent maximum i.e. 64% respondent belongs to 18-23 age group, 19.33% customers belongs to 23-29 age group. (Refer Table 3).

It is opine that that maximum i.e. 79.33% respondent involved in this research are still studying in some college but not graduate. (Refer Table 4)

It is observed maximum i.e. 71.33% respondent did online shopping 1-5 times in last one year, 26.67% respondent did online shopping 6-10 times in last one year. (Refer Table 5)

It is observed that maximum i.e. 94.67% respondent preferred to shop Clothes, followed by 87.33% respondent preferred to shop Mobile Accessories online by Flipkart website. (Refer Table 6)

Factor Analysis:

Ninteen variables were used for the factor analysis on 150 samples, which are online buyers. The KMO and Bartlett's measure comes to 0.638, which shows data adequacy for factor analysis. Seven factors have been extracted using principal component methods, which explain 69.43% of variance. The variables on rotated component matrix labeled viz. Customer Service provided by website for Online Buyers, Reliability of website, Usefulness of website, Trust on website, Customers satisfaction after dealing with website,

Web site desing or nivation of site and prompt service It reveals that factor one, 'Customer Service' explains 19.198% of variance which is the greatest value amongst all factors extracted hence, marketers dealing in online shopping should address this factor which carries four variables. Another important factor are, 'Reliability' with 12.124% of variance which carries three variables and factor, 'Usefulness' with 10.503% of variance which carries two variables.

Conclusion:

This research work attempts to find out factors that affect online buyer to select respective website for online shopping. Result of the research indicates Customer Service is the most important influencing factors that attract online consumers to select website to shop online. Reliability, usefulness and trust on website are other factors that affect the decision of website selection. Regarding products which preferred by online buyers are clothes and Mobile accessories.

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Implementation of Common Business Components in Distributed Enterprise Business Applications for Interoperability

Manish Peshkar, Vinay Chavan

Abstract:

The paper attempts to check whether the implementation of common business components in web based business application, in distributed business, increases the flexibility and interoperability in different modules which are common to EBA. Enterprise Business Applications, in different sectors viz. Corporate, Private and local Urban bodies, have been tested for the degree of implementation of common variants as against the flexibility and interoperability. The result confirms increase in interoperability.

Keywords: Common Variants, Enterprise Business, Information System, Enterprise Business Components, Functional Requirements, Interoperability.

Introduction :

Designing and developing the enterprise applications are basically oriented to satisfy numerous diverse requirements. While addressing this, each and every development decision to address each requirement simultaneously affects many other requirements, which may be hard to understand. This may lead to a completely frustrating as well futile exercise if met with failure if any of other requirements is not considered or not addressed in a right way, and leads to failure of the project.

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The enterprise application model therefore be an endeavor to look to the enterprise application as a vast, all absorbing and covering varied and unseen aspects to carve out orderly method in its complexity. It organizes an applications requirement into a compact but sleekest of distinct and inter-dependent categories. This would show how each requirement of business interacts with other requirements. The business application can be an apt balancing effort while choosing each design which will be not only useful but will not act against all other requirements also. This would deprive the user or designer to ignore or underestimate some important design considerations, as it would break up the complex task into small sets which would be in manageable size. Every enterprise would require an application which fulfills its needs/requirements particularly in terms of time, costing, quality and updated technology. This can be possible if an application is designed to fulfill the wants of enterprise. The enterprise business applications can be designed by inclusion of areas

like HR, Pay-roll system, financial and many more.

A common requirement while developing business applications is to support variations in the behavior of business applications based on factors like business structure, lines of business (LOB), customer segment/cluster, delivery channel, user location and many more while deploying the application. The application designed for a domain does not suffice the factors considered but different business processes are required to have different behavioral pattern for different activities and operations of enterprises business.

Different services are used in multiple business contexts like in different LOBs marketing channels and across multiple geographies. There thus arises a need for variations to enable them to operate in such different conditions & contexts. Amongst limitations with the current service oriented architecture (SOA), the strategy of several enterprises is that it lacks well defined solution for managing this variation. Thus so far identified variations are interspersed so much that they quickly become unmanageable. The distributed business poses different challenges for the management of business are:

Definitions:

In enterprise business application parlance,

- i. Application functionality which is commonly used across the application.
- ii. Flexibility is the ability of application to effectively vary its behavior within a certain range without having to modify the application code.
- iii Interoperability is a property of a system, whose interfaces are completely used, to work with other systems, without any restricted access or implementation.
- iv. Common variants or common components: - common self-sufficient piece of

$$\text{Interoperability} = \frac{\text{Number of component found interlinked}}{\text{Total number of components}} \times 100$$

Interoperability in the Models:

Interoperability is a property of a system, whose interfaces are completely used, to work with other systems, without any restricted access or implementation. It is used to check absolute dominance of the particular model in the system. Model Driven Interoperability (MDI) is a methodological framework, which provides a conceptual and technical support to make

- i. Demands the diversity in functional aspects of the application.
- ii. Implementation of standard operating procedures yet provides the last mile localization to the business process.
- iii. Depending on the market competition, effective Implementation of new schemes and business policies from time to time.
- iv. Statutory compliance of business.
- v. Get common/consolidated view of business operations.

The solution to the challenges stated above, are sought in an enterprise business application. With the advent of internet, most of the organizations have started hosting the enterprise applications centrally either on premise or in cloud environment. The implementation of common variants is irrespective of application architecture/ technology i.e client/server or web-enabled or web or mobile app. This common enterprise business application offers tremendous interoperability in the operation of business and its applications.

enterprise interoperable and semantic way of studying interlinking between the models used in analysis, development and implementation of EBA system.

Interoperability in the models is used for achieving maximum interconnection in the different model at most of the levels in EBA systems. Model driven interoperability can be used to interoperate not only at the low level of system implementation

but also at enterprise level with aim to improve the performance of the models used in system. Therefore, it promotes systematic use of models as primary base for artifacts the system where maximum interoperability can achieve, means minimum effort are needed to develop the application system. Mostly interoperability is domain specific, where commonality of model plays very important role, i.e. more the common models more the interoperability and lesser development efforts.

This research is mainly derived after analyzing a theoretical part and empirical study. Therefore, the basic attempt of this research is to find out all such cross-cutting concerns and identify the common components in web base enterprise business applications for interoperability and to identify the functional areas and domains which can be used for similarities to facilitate different common functionalities used in EBA. It finds and to find all functionalities and requirements of internal and external interfaces, attributes and defining the performance standard which are used by common variants in real life situations of business applications.

On the basis of study of primary data collected and the scrutiny and perusal of secondary one, the reusable and self combined business common components with well defined interaction point facilitate the accessing and execution of coherent business functionalities and used for identifying common business components. The web based infrastructure and communication technology in distributed business enables the implementation of common business components between companies' to increase the interoperability of their enterprise business application.

Organization Selection:

The sample size of data collection has been confined to five corporate sector companies, five public sector organizations and four local urban bodies. The selection of these 14 establishments has not been on random basis but has been identified for specific purpose of finding out commonalities and different aspects to be covered based on their constitutions and implementing

EBA. In the initial survey for selection of companies about fifty were selected. In detail discussions with the company head, it was observed that only 14 companies are having EBA solution implemented. In the corporate sector five companies have different line of activities and requirements of these companies are also different. A few are station oriented whereas others have multiple stations of operations. As far public sector undertakings are concerned the line of business varies from one undertaking to another although the government rules and regulations are basically same for certain areas, there are altogether different approaches for production, marketing, receivables, taxes, duties, etc. The functions and authorities vested with different administrative personnel have also different setup. A public undertaking dealing in coal has fixed clientele, whereas Bharat Heavy Electricals Limited has contract based production involving technocrats, heavy duty vehicle handlers, etc.

It could therefore be seen that variety of establishments having different setups and work modalities have been purposefully opted so as to have wide canvas of activities to enable to come to a conclusion of sorting out common variants and operability thereof. The study undertaken of these units and dissection of data so collected helped immensely for the research work as the lines of business of these diverse establishments give a specific idea of developing an application usable across the domains.

It has also been observed that each organization works under different and multiple legal entities. The identified common variants have been further minimized and made functionally independent logical units; which have been listed below:

- i. Multiple Organization Support
- ii. Application Set-Up Parameters
- iii. System Administration
- iv. User Management
- v. Calendar
- vi. Notification
- vii. User Preferences
- viii. Document Number Generation

- ix. Document Preservation
- x. Application Statistics
- xi. Workflow & Multilingual Support
- xii. Multiple Database Support
- xiii. Security
- xiv. Interfacing
- xv. Synchronization
- xvi. Change Management

These common variants have been explained for their functionality and variations, they can be provided to Enterprise Business Application in subsequent handling section.

Result and Discussion:

The interoperability may be the result of the absolute dominance of models interconnects in the system. The system can choose different models and its links to other models. Because of the networking models in the organization, achieving interoperability becomes critical issue and difficult to accomplish because of lack of usage in the total system and linked with other modules. The model and its links to different model are found while studying the implementation of EBA in the organization. Following tables gives the interoperability on the different models used in EBA development in the organizations covered under study.

Table 1: Interoperability in the modules:

Sr.No	organisation	Synchronized with number of areas	Number of modules in system	Number of modules for EBA implementation	EBA implementation completed	Number of modules linked with each other	Interoperability in total EBA modules	Interoperability in EBA modules
1	EBA-1	23	9	7	6		57.14	66.67
2	EBA-2	8	7	5	4	4	80.00	100.00
3	EBA-3	7	9	8	6	4	50.00	66.67
4	EBA-4	7	10	9	6	4	44.44	66.67
5	EBA-5	1	5	4	2	2	50.00	100.00
6	EBA-6	6	9	7	5	3	42.86	60.00
7	EBA-7	10	8	6	4	3	50.00	75.00
8	EBA-8	3	5	4	3	2	50.00	66.67
9	EBA-9	17	5	4	3	2	50.00	66.67
10	EBA-10	3	6	5	4	3	60.00	75.00
11	EBA-11	16	6	4	3	2	50.00	66.67
12	EBA-12	0	4	2	1	1	50.00	100.00
13	EBA-13	0	3	2	1	1	50.00	100.00
14	EBA-14	0	2	2	1	1	50.00	100.00
	Average of Total						52.46	79.29

(Source - complied by the researcher)

(Note: - Because of secrecy, data used for evaluation of the commonality and interoperability names of the organization is not disclosed)

In the Web based infrastructure and communication technology in distributed business enables the implementation of common business components between companies increases the interoperability of their business application.

The analysis of EBA interoperability of components used in implementation of EBA solution for commonality is studied in the organizations. As most of the organization's EBA solutions have common component in the total component and most of the models have link with each other. Its interoperability is calculated based on the number of models linked with each other. In the analysis it is observed that the interoperability in the total modules and modules which are identified as common in the system have significant commonality. Significant value of interoperability is because of web based EBA solutions. Thus Web based infrastructure and ICT in distributed business enables the implementation of common business components between company's increases the interoperability of their enterprise business application.

While analyzing the usual variants, it was found that there are various common variants which are also applicable for a compact mechanism which covered the vast area of multiple organization support, applications set-up parameters, systems administration, user management, calendar, notifications, user preferences, document preservation, application statistics, work-flow, multi-lingual support , multiple database support, interfacing, synchronization and change management.

Dealing with enterprise set-up, it has been inferred that each independent functional unit having modules is further segregated independently and has lots of documents like indent, purchase order, purchase return, receipt voucher, issue voucher and may have micro effects of belongingness, creators information, responsibility, uniqueness, supporting/dependent, date and time document enforcement, document data, etc. which are found as common in the development of EBA solutions.

The identification of common components increases the usability of common components in the EBA solutions. The usability of the common components in total components is 59.98%, but the usability of the common components in the commonality is around 52.93%, in components usability of EBA commonality is observed to be 77.68%, whereas usability of common variables in the system is found to be 67.89% in the total system. The variation in the common components usability is because of multiple supports in the almost all the organizations in which EBA application implementations across multiple locations. The interoperability of the common components in total variables is 52.46%, the interoperability of the common components in the commonality for interoperability is around 79.29%. The variation in the common interoperability is observed is because less number of modules is considering for implementation of EBA application implementations across multiple locations in the all most all the organizations.

Conclusions:

Interoperability of the modules is used for finding that how many modules are commonly linked with each other. If maximum number of modules are linked with each other means that interoperability in the modules are maximum. In the table of interoperability it is observed that interoperability in the total EBA models is achieved by number of organizations. Whereas interoperability in EBA implementation is achieved 100% by five organizations because all the modules designed for EBA are linked with each other.

Perhaps greater awareness about usage of such common variants and common components has advantage in developing the EBA solution of enterprise business. It provides substantial value addition and minimizing development efforts. The use of common variants and common components in the EBA solutions in the organizations are successfully using for EBA. The main focus of making use of commonality of variants and

components is for interoperability, which decreases the complexity of the EBA problem in the organization. This helps in reducing the development time and cost of EBA application in most of the organization. The identification of common components increases the interoperability of common components in the EBA solutions.

Variants and component commonality in EBA solution is used in business processes to integrate various applications to share business components. Common functionality of enterprise business shared between different applications within the enterprise access without rewriting each method within the respective applications. Common architecture developed for EBA operations are comprehensive with multiple framework of organization comprises of 51 common attribute in 18 common functionalities is identified that detail the constitution of EBA.

The common component and integrated enterprise business application designed after bringing all common variants identified through this work would be par excellent and time tested and would be available at the reduced cost and shall bring all together new dimension which will not only rise above the limited approach but would create a milestone of revolution, if examined and applied in perfect perspective and appreciated.

By using the common functionalities of other domains can also be brought under one set-up. Other commonalities of variants which can identify any another perspective can have operability by grouping the usual common variants and other, less common variants so that both perspectives can give desired results.

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Investors Socio Economic Profile and Their Investment Pattern

Sarang Shankar Bhola, Priyanka Zanvar

Abstract:

In recent times, the investment companies have emerged as the most dynamic segment in the Indian financial system. Reforms in the Indian economic system and the opening up of the economy have been the reasons for the tremendous growth in the Indian capital market. This study analyzes the impact of socio economic variables on the attitude of investors towards investments. To achieve, 770 respondents of Pune city, having different socio economic profiles were surveyed. The results also highlight that certain factors like education level, awareness about the financial system, age of invertors etc make significant impact while deciding on the investment patterns for investment. Further, it is observed that the level of income also influences the investment decisions. Higher income group shows relatively high preference towards investment in risky Investment avenues, conversely lower and average income group shows keen preference towards insurance and banks as the most preferred investment avenues.

Keywords : Socio Economic Class, Investment Pattern, Guiding Factors, Sources of Information.

Introduction :

Until the decade of the 90's, most of the middle class Indians were paying little attention to managing personal finance during their working life span and only at the time of retirement they would consult their well wishers or advisors about

some deposit schemes with banks or post office or companies which would ensure them regular monthly or quarterly returns. A very small percentage investors would experiment in stock markets or UTI schemes.

With the advent of the new millennium, needs have multiplied and changed and so have the solutions.

Now a day, Investments have become a basic necessity for everyone. In our country there is a rapid growth in investment. More number of investors is investing their funds in different types of investment opportunities. Investing wisely is a function if investors' specific needs and goals. Each investor has different objectives that need to be met depending on age, income and attitude towards risk. Investors have to work out with their investment profile to determine which investments are right for them and should consider important factors such as personal status, plans and constraints.

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Review of Literature and Research Gap:

Mukhi, (1989) has revealed that NSC has been one of the most popular tax savings instruments in this country. He has stated that contractor and others who have to provide security while bidding for contracts finds it extremely convenient to buy NSC and pledge these to the appropriate authorities while earning 12 per cent per annum on the pledged securities. He also stated that the major attraction of NSC is its simplicity. Even the average investor does not have to scratch his head to understand the scheme.

Guiso, Jappelli and Terlizzese (1996), Bajtelsmit and VenDerhei (1997), Powell and Ansic (1997), Jianakoplos and Bernasek (1998), Hariharan, Chapman and Domain (2000), Hartog, Ferrer-ICarbonell and Jonker (2002) concluded that males are more risk tolerant than females. Rajarajan. V. (2003) studies brought out the existence of strong association between demographic characteristics and the risk bearing capacity of Indian investors, the relationship between age, income and risk bearing capacity of the investors are very high. The salaried members constituted the largest part of all categories.

Sharma. B.C. and Sharma Dinesh's (2004) research paper explores the literature and points out that stock investment activity by retail investors is very low in India. This paper studied about retail investor's investment patterns behavior and attitudes that they hold about stock investing in the context is of small emerging market of Jammu. The result of the study showed that profile of retail investor as young, well informed and also regular traders. However, they hold moderately low belief towards stock market Institution's regulatory capabilities and towards safety of small investor.

V.L shobhana and J.Jayalakshmi in their study titled 'investor Awareness and Preference. A study" (2005) has examined the level of investor awareness regarding investment options and investment risks. The analysis revealed that investment in real estate/property is preferred by majority of the respondents. The second most preferred investment is bank deposits. Awareness

about investment options and risks are high among old aged, highly educated and those who are professionals by occupation. Demographic variables such as age and education do not have significant influence over investor awareness where as difference in occupational status leads to difference in the awareness level of people.

Love D.A (2010) investigated the impact of demographic shocks on optimal decisions about savings, life insurance and most certainly assets allocation and found that marital status transitions could have important effects on optimal household decisions, particularly in the cases of widowhood and divorcee. He also found that children also play a fundamental role in portfolio choice, and the literature on optimal portfolio choice over the life cycle has focused on the roles of housing costs and background risks due to labor income. His empirical evidence shows that divorce and widowhood have particularly strong effects on allocations, and that these effects differ significantly by gender, age and number of children.

Rajarajen Vanjeko (2010) individual investors are the backbone of the capital market. The growth of the capital market during the last few years has substantially increased the investor population in our country. The investment scene has undergone a sea change. This context necessitates an understanding of the characteristics of investors in terms of their investments, strategies, expectations etc. this paper presents some interesting information on this line on the basis of information collected from over thousand individual investors from eleven cities of India. This study suggests the use of these characteristics for a better understanding of individual investors and their financial product needs. It also shows investor's future investment preferences. The study reveals the increasing popularity of equity as an investment option among individual investors.

In India the research in behavioral finance is gaining attention of researchers. The researchers have been studying this subject from different perspectives. From the review it can be prominently pointed out that researchers have

approached this subject from macro perspective and tried to generalize the results. There is a need to explore the subject further at macro level on the basis of different dimensions to facilitate thinking at micro level. One approach to look at investment pattern of investors is to examine investment as per investor's Socio Economic Class. This study is an attempt in this direction.

Concept of Socio Economic Class (SEC):

In a bid to keep pace with the fast-evolving economic outlook, consumer attitudes and preferences in the country, the Media Research Users' Council (MRUC) and the Market Research Society of India (MRSI) recently unveiled a new Socio-Economic Classification (SEC) system, under which all Indian households will be now classified.

The New SEC is based on Educational Qualifications of the chief wage owner in the household; and the Number of Assets Owned (out of a pre-specified list of 11 assets). The socio-economic classification is then segregated into 12 groups based on inputs on these 2 parameters - A1, A2, A3, B1, B2, C1, C2, D1, D2, E1, E2 and E3. These 12 groups are applicable to both urban and rural India.

Research Methodology:

Present study is based on Empirical Research. Present research work is set to study following objectives.

1. To study Existing and Future investment pattern of respondents on the basis of Socio Economic Classes.

2. To understand Objectives behind investment decision making.
3. To determine guiding factors which influence investment decision Making.
4. To understand the sources of information for investment availed by respondents from different Socio Economic Classes.

Structured Schedule was used to collect primary data. It was divided into five parts. The structures were Percentage of existing investment and future preferences, Objectives behind Investment, Guiding Factors, Sources of information availed and demographic profile of sample respondents.

The scope of the research was the metropolitan city of Pune. Stratified convenient sampling technique was used to draw sample from population. Stratification is done on the basis Socio-economic Classes. These Socio-economic Classes are defined on the basis of number of household items owned and educational qualification. Samples from all groups were approached conveniently. Total sample Size was 670. Collected data are classified using electronic spread sheet; Various statistical tools like Rank, Spearman rank correlation , Paired Sample 't' test, ANOVA, are used to analyze the data.

Data Analysis and Discussions:

It deals with Investment pattern of sample respondents on the basis of Socio Economic Class. Spearman rank correlation between Existing Investment, Future Investment Preferences, Objectives behind Investment, Guiding Factors behind investment and Sources of Information availed by sample respondents are discussed .

Table 1: Spearman Rank Correlation between Socio Economic Classes and Existing Investments (n-770)

S.N		Particulars	A1	A2	A3	B1	B2	C1	C2	D1	D2	E1	E2	E3
1	A1	Correlation Coefficient	1.000	.897	.980	.931	.676	.664	.724	.455	.529	.203	.922	.710
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000	.000	.022	.007	.329	.000
2	A2	Correlation Coefficient	.897	1.000	.853	.913	.767	.774	.756	.601	.635	.436	.808	.814
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000	.001	.001	.029	.000	.000
3	A3	Correlation Coefficient	.980	.853	1.000	.909	.658	.648	.701	.414	.511	.175	.908	.679
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.040	.009	.402	.000	.000
4	B1	Correlation Coefficient	.931	.913	.909	1.000	.742	.725	.765	.574	.632	.425	.913	.830
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000	.003	.001	.034	.000	.000
5	B2	Correlation Coefficient	.676	.767	.658	.742	1.000	.828	.853	.832	.859	.661	.733	.840
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000
6	C1	Correlation Coefficient	.664	.774	.648	.725	.828	1.000	.888	.827	.791	.649	.693	.872
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000
7	C2	Correlation Coefficient	.724	.756	.701	.765	.853	.888	1.000	.723	.759	.531	.803	.913
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.	.000	.000	.006	.000	.000
8	D1	Correlation Coefficient	.455	.601	.414	.574	.832	.827	.723	1.000	.804	.864	.516	.739
		Sig. (2-tailed)	.022	.001	.040	.003	.000	.000	.000	.	.000	.000	.008	.000
9	D2	Correlation Coefficient	.529	.635	.511	.632	.859	.791	.759	.804	1.000	.677	.645	.820
		Sig. (2-tailed)	.007	.001	.009	.001	.000	.000	.000	.000	.000	.	.000	.000
10	E1	Correlation Coefficient	.203	.436	.175	.425	.661	.649	.531	.864	.677	1.000	.283	.661
		Sig. (2-tailed)	.329	.029	.402	.034	.000	.000	.006	.000	.000	.	.170	.000
11	E2	Correlation Coefficient	.922	.808	.908	.913	.733	.693	.803	.516	.645	.283	1.000	.765
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.008	.000	.170	.	.000
12	E3	Correlation Coefficient	.710	.814	.679	.830	.840	.872	.913	.739	.820	.661	.765	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.

Source: (Compiled by Researcher)

Table 1 reveals that there is significant difference between existing investment pattern of SEC E1 and SEC A1, A3, B1 and E2. There is moderate significance found between SEC D2 and SEC A1 and A3. Between SEC E1 and SEC A2 and B1, there is moderate significance between existing investments of respondents.

Following table shows spearman rank correlation between future preferences of investment pattern.

Table 2: Spearman Rank Correlation between Socio Economic Classes and Future Preferred Investment (n-770)

S.N		Particulars	A1	A2	A3	B1	B2	C1	C2	D1	D2	E1	E2	E3
1	A1	Correlation Coefficient	1.000	.741**	.917**	.901**	.948**	.645**	.707**	.779**	.831**	.732**	.706**	.612**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000
2	A2	Correlation Coefficient	.741**	1.000	.706**	.763**	.804**	.645**	.676**	.749**	.717**	.728**	.621**	.605**
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.001	.001
3	A3	Correlation Coefficient	.917**	.706**	1.000	.905**	.939**	.629**	.679**	.762**	.817**	.724**	.669**	.558**
		Sig. (2-tailed)	.000	.000	.	.000	.000	.001	.000	.000	.000	.000	.000	.004
4	B1	Correlation Coefficient	.901**	.763**	.905**	1.000	.971**	.690**	.762**	.847**	.836**	.769**	.703**	.676**
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000
5	B2	Correlation Coefficient	.948**	.804**	.939**	.971**	1.000	.741**	.804**	.890**	.895**	.832**	.777**	.713**
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000
6	C1	Correlation Coefficient	.645**	.645**	.629**	.690**	.741**	1.000	.883**	.863**	.817**	.776**	.704**	.782**
		Sig. (2-tailed)	.001	.000	.001	.000	.000	.	.000	.000	.000	.000	.000	.000
7	C2	Correlation Coefficient	.707**	.676**	.679**	.762**	.804**	.883**	1.000	.949**	.902**	.934**	.893**	.903**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000
8	D1	Correlation Coefficient	.779**	.749**	.762**	.847**	.890**	.863**	.949**	1.000	.943**	.948**	.899**	.877**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000
9	D2	Correlation Coefficient	.831**	.717**	.817**	.836**	.895**	.817**	.902**	.943**	1.000	.921**	.866**	.808**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000
10	E1	Correlation Coefficient	.732**	.728**	.724**	.769**	.832**	.776**	.934**	.948**	.921**	1.000	.947**	.868**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000
11	E2	Correlation Coefficient	.706**	.621**	.669**	.703**	.777**	.704**	.893**	.899**	.866**	.947**	1.000	.892**
		Sig. (2-tailed)	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	.	.000
12	E3	Correlation Coefficient	.612**	.605**	.558**	.676**	.713**	.782**	.903**	.877**	.808**	.868**	.892**	1.000
		Sig. (2-tailed)	.001	.001	.004	.000	.000	.000	.000	.000	.000	.000	.000	.

Source: (Compiled by Researcher)

Table 2 reveals that spearman rank correlation between future investment pattern of sample respondents on the basis of SEC are correlated. Moderate correlation found between SEC E3 and SEC A1, A2, A3 and B1. Also there is moderate correlation found in SEC E2 and SEC A2 and A3.

Following table shows spearman rank correlation between objectives behind investment.

Table 3: Spearman Rank Correlation between Objectives behind Investment (n-770)

S.N	Particulars	A1	A2	A3	B1	B2	C1	C2	D1	D2	E1	E2	E3	
1	A1	Correlation Coefficient	1.000	.824	.717	.851	.855	.719	.618	.587	.334	.292	.350	.282
		Sig. (2-tailed)	.	.000	.004	.000	.000	.004	.018	.027	.243	.311	.220	.329
2	A2	Correlation Coefficient	.824	1.000	.713	.877	.727	.776	.748	.794	.662	.543	.640	.453
		Sig. (2-tailed)	.000	.	.004	.000	.003	.001	.002	.001	.010	.045	.014	.104
3	A3	Correlation Coefficient	.717	.713	1.000	.898	.836	.862	.750	.696	.585	.488	.553	.412
		Sig. (2-tailed)	.004	.004	.	.000	.000	.000	.002	.006	.028	.076	.040	.143
4	B1	Correlation Coefficient	.851	.877	.898	1.000	.873	.877	.752	.719	.583	.464	.581	.425
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.002	.004	.029	.095	.029	.130
5	B2	Correlation Coefficient	.855	.727	.836	.873	1.000	.934	.838	.748	.526	.495	.524	.502
		Sig. (2-tailed)	.000	.003	.000	.000	.	.000	.000	.002	.053	.072	.055	.068
6	C1	Correlation Coefficient	.719	.776	.862	.877	.934	1.000	.911	.838	.704	.604	.609	.528
		Sig. (2-tailed)	.004	.001	.000	.000	.000	.	.000	.000	.005	.022	.021	.052
7	C2	Correlation Coefficient	.618	.748	.750	.752	.838	.911	1.000	.844	.754	.642	.687	.683
		Sig. (2-tailed)	.018	.002	.002	.002	.000	.000	.	.000	.002	.013	.007	.007
8	D1	Correlation Coefficient	.587	.794	.696	.719	.748	.838	.844	1.000	.923	.893	.854	.738
		Sig. (2-tailed)	.027	.001	.006	.004	.002	.000	.000	.	.000	.000	.000	.003
9	D2	Correlation Coefficient	.334	.662	.585	.583	.526	.704	.754	.923	1.000	.906	.822	.685
		Sig. (2-tailed)	.243	.010	.028	.029	.053	.005	.002	.000	.	.000	.000	.007
10	E1	Correlation Coefficient	.292	.543	.488	.464	.495	.604	.642	.893	.906	1.000	.854	.779
		Sig. (2-tailed)	.311	.045	.076	.095	.072	.022	.013	.000	.000	.	.000	.001
11	E2	Correlation Coefficient	.350	.640	.553	.581	.524	.609	.687	.854	.822	.854	1.000	.861
		Sig. (2-tailed)	.220	.014	.040	.029	.055	.021	.007	.000	.000	.000	.	.000
12	E3	Correlation Coefficient	.282	.453	.412	.425	.502	.528	.683	.738	.685	.779	.861	1.000
		Sig. (2-tailed)	.329	.104	.143	.130	.068	.052	.007	.003	.007	.001	.000	.

(Source : Compiled by Researcher)

Table 3 reveals that spearman rank correlation between objectives behind investment on the basis of SEC are correlated. Difference found in objectives behind investment of SEC A1 and SEC D2, E1, E2 and E3. Moderate correlation found between SEC E1 and SEC A3, B1 and B2. Also there is moderate correlation found in SEC E2 and SEC A2 and A3.

Following table shows spearman rank correlation between guiding factors behind investment.

Table 4: Spearman Rank Correlation between Guiding Factors Behind Investment (n-770)

S.N	Particulars	A1	A2	A3	B1	B2	C1	C2	D1	D2	E1	E2	E3	
1	A1	Correlation Coefficient	1.000	.922**	.975**	.970**	.931**	.861**	.864**	.783**	.768**	.750**	.711**	.647**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000	.001	.001	.001	.003	.009
2	A2	Correlation Coefficient	.922**	1.000	.944**	.942**	.974**	.955**	.922**	.843**	.847**	.803**	.713**	.628*
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.003	.012
3	A3	Correlation Coefficient	.975**	.944**	1.000	.955**	.956**	.904**	.871**	.765**	.739**	.704**	.621*	.570*
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.001	.002	.003	.013	.026
4	B1	Correlation Coefficient	.970**	.942**	.955**	1.000	.954**	.851**	.852**	.821**	.807**	.751**	.712**	.621*
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000	.000	.000	.001	.003	.013
5	B2	Correlation Coefficient	.931**	.974**	.956**	.954**	1.000	.914**	.887**	.814**	.813**	.758**	.679**	.589*
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000	.000	.000	.001	.005	.021
6	C1	Correlation Coefficient	.861**	.955**	.904**	.851**	.914**	1.000	.965**	.825**	.826**	.844**	.713**	.651**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.003	.009
7	C2	Correlation Coefficient	.864**	.922**	.871**	.852**	.887**	.965**	1.000	.861**	.882**	.932**	.825**	.761**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.001
8	D1	Correlation Coefficient	.783**	.843**	.765**	.821**	.814**	.825**	.861**	1.000	.976**	.869**	.799**	.787**
		Sig. (2-tailed)	.001	.000	.001	.000	.000	.000	.000	.	.000	.000	.000	.000
9	D2	Correlation Coefficient	.768**	.847**	.739**	.807**	.813**	.826**	.882**	.976**	1.000	.918**	.886**	.858**
		Sig. (2-tailed)	.001	.000	.002	.000	.000	.000	.000	.000	.	.000	.000	.000
10	E1	Correlation Coefficient	.750**	.803**	.704**	.751**	.758**	.844**	.932**	.869**	.918**	1.000	.946**	.860**
		Sig. (2-tailed)	.001	.000	.003	.001	.001	.000	.000	.000	.000	.	.000	.000
11	E2	Correlation Coefficient	.711**	.713**	.621*	.712**	.679**	.713**	.825**	.799**	.886**	.946**	1.000	.933**
		Sig. (2-tailed)	.003	.003	.013	.003	.005	.003	.000	.000	.000	.000	.	.000
12	E3	Correlation Coefficient	.647**	.628*	.570*	.621*	.589*	.651**	.761**	.787**	.858**	.860**	.933**	1.000
		Sig. (2-tailed)	.009	.012	.026	.013	.021	.009	.001	.000	.000	.000	.000	.

(Source: Compiled by Researcher)

Table 4 reveals that spearman rank correlation between guiding factors behind investment on the basis of SEC are correlated. Moderate correlation found between SEC E3 and SEC A1, A2, A3, B1, B2 and C1.

Following table shows spearman rank correlation between Sources of information availed by sample respondents.

Table 5: Spearman Rank Correlation between Sources of Information Availed (n-770)

S.N	Particulars	A1	A2	A3	B1	B2	C1	C2	D1	D2	E1	E2	E3	
1	A1	Correlation Coefficient	1.000	.926**	.966**	.936**	.933**	.775**	.744**	.631**	.620**	.693**	.668**	.623**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.001	.007	.008	.002	.003	.008
2	A2	Correlation Coefficient	.926**	1.000	.914**	.924**	.926**	.830**	.820**	.740**	.679**	.774**	.668**	.600*
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000	.001	.003	.000	.003	.011
3	A3	Correlation Coefficient	.966**	.914**	1.000	.958**	.955**	.792**	.779**	.677**	.669**	.730**	.713**	.663**
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.003	.003	.001	.001	.004
4	B1	Correlation Coefficient	.936**	.924**	.958**	1.000	.978**	.867**	.866**	.783**	.765**	.834**	.796**	.755**
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000
5	B2	Correlation Coefficient	.933**	.926**	.955**	.978**	1.000	.879**	.886**	.818**	.801**	.854**	.833**	.777**
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000
6	C1	Correlation Coefficient	.775**	.830**	.792**	.867**	.879**	1.000	.940**	.910**	.917**	.932**	.863**	.855**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000
7	C2	Correlation Coefficient	.744**	.820**	.779**	.866**	.886**	.940**	1.000	.943**	.912**	.975**	.937**	.881**
		Sig. (2-tailed)	.001	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000
8	D1	Correlation Coefficient	.631**	.740**	.677**	.783**	.818**	.910**	.943**	1.000	.968**	.975**	.889**	.849**
		Sig. (2-tailed)	.007	.001	.003	.000	.000	.000	.000	.	.000	.000	.000	.000
9	D2	Correlation Coefficient	.620**	.679**	.669**	.765**	.801**	.917**	.912**	.968**	1.000	.958**	.894**	.888**
		Sig. (2-tailed)	.008	.003	.003	.000	.000	.000	.000	.000	.	.000	.000	.000
10	E1	Correlation Coefficient	.693**	.774**	.730**	.834**	.854**	.932**	.975**	.975**	.958**	1.000	.943**	.916**
		Sig. (2-tailed)	.002	.000	.001	.000	.000	.000	.000	.000	.000	.	.000	.000
11	E2	Correlation Coefficient	.668**	.668**	.713**	.796**	.833**	.863**	.937**	.889**	.894**	.943**	1.000	.975**
		Sig. (2-tailed)	.003	.003	.001	.000	.000	.000	.000	.000	.000	.000	.	.000
12	E3	Correlation Coefficient	.623**	.600*	.663**	.755**	.777**	.855**	.881**	.849**	.888**	.916**	.975**	1.000
		Sig. (2-tailed)	.008	.011	.004	.000	.000	.000	.000	.000	.000	.000	.000	.

(Source: Compiled by Researcher)

Table 5 reveals that spearman rank correlation between Sources of Information availed by sample respondents on the basis of SEC are correlated. Moderate correlation found between SEC E3 and SEC A1, A2, and A3. Also there is moderate correlation found between SEC E2 and SEC A1, A2.

Analysis of Existing Investment in Investment Instruments:

Following table shows ANOVA testing of investment instruments according to socio economic class of respondents. ANOVA is calculated on the Existing Investments of the respondents. The data for existing investment is normalized.

Table 6: ANOVA Testing of Investment Instruments

(n-710)

ANOVA							
S. N.			Sum of Squares	df	Mean Square	F	Sig.
1	NSC	Between Groups	503.14	11	45.740	3.219	.000
		Within Groups	9918.02	698	14.209		
		Total	10421.16	709			
2	PPF	Between Groups	5099.60	11	463.600	4.110	.000
		Within Groups	78741.95	698	112.811		
		Total	83841.55	709			
3	Bank Fixed Deposits	Between Groups	119926.51	11	10902.410	17.882	.000
		Within Groups	425572.65	698	609.703		
		Total	545499.15	709			
4	PO Schemes	Between Groups	12148.19	11	1104.380	11.032	.000
		Within Groups	69877.31	698	100.111		
		Total	82025.49	709			
5	Govt Securities	Between Groups	400.15	11	36.377	1.572	.102
		Within Groups	16155.10	698	23.145		
		Total	16555.25	709			
6	Insurance	Between Groups	8490.13	11	771.830	2.609	.003
		Within Groups	206486.66	698	295.826		
		Total	214976.80	709			
7	Mutual Funds	Between 8Groups	4162.08	11	378.371	9.554	.000
		Within Groups	27644.40	698	39.605		
		Total	31806.48	709			
8	ELSS	Between Groups	115.78	11	10.525	2.749	.002
		Within Groups	2672.11	698	3.828		
		Total	2787.89	709			
9	Debentures	Between Groups	156.79	11	14.254	1.718	.065
		Within Groups	5789.82	698	8.295		
		Total	5946.62	709			
10	Bonds	Between Groups	1080.32	11	98.211	7.524	.000
		Within Groups	9111.23	698	13.053		
		Total	10191.55	709			

S. N.			Sum of Squares	df	Mean Square	F	Sig.
11	Gold	Between Groups	8470.92	11	770.084	6.418	.000
		Within Groups	83755.87	698	119.994		
		Total	92226.80	709			
12	Company Deposits	Between Groups	155.74	11	14.158	2.205	.013
		Within Groups	4482.15	698	6.421		
		Total	4637.89	709			
13	SIP	Between Groups	1351.27	11	122.843	2.145	.016
		Within Groups	39977.04	698	57.274		
		Total	41328.31	709			
14	ULIP	Between Groups	342.91	11	31.173	3.748	.000
		Within Groups	5804.98	698	8.317		
		Total	6147.89	709			
15	Commodity Market	Between Groups	441.99	11	40.180	5.551	.000
		Within Groups	5051.99	698	7.238		
		Total	5493.98	709			
16	NBFC	Between Groups	5.50	11	.500	1.799	.051
		Within Groups	193.94	698	.278		
		Total	199.44	709			
17	Livestock	Between Groups	3330.02	11	302.729	4.276	.000
		18Within Gr19oups	49415.56	698	70.796		
		Total	52745.58	709			
18	Real Estate	Between Groups	2266.63	11	206.057	3.515	.000
		Within Groups	40923.57	698	58.630		
		Total	43190.19	709			
19	Chit Funds	Between Groups	5914.54	11	537.686	2.198	.013
		Within Groups	170721.94	698	244.587		
		Total	176636.48	709			
20	Shares	Between Groups	4363.91	11	396.719	7.765	.000
		Within Groups	35660.88	698	51.090		
		Total	40024.79	709			
21	Forex Market	Between Groups	40.45	11	3.678	1.336	.200
		Within Groups	1921.83	698	2.753		
		Total	1962.29	709			
22	Private Equity	Between Groups	4.81	11	.437	.889	.551
		Within Groups	342.94	698	.491		
		Total	347.75	709			

S. N.			Sum of Squares	df	Mean Square	F	Sig.
23	Credit Society	Between Groups	12600.16	11	1145.469	6.448	.000
		Within Groups	123994.52	698	177.643		
		Total	136594.68	709			
24	Any Others	Between Groups	6172.06	11	561.097	5.056	.000
		Within Groups	77462.58	698	110.978		
		Total	83634.65	709			

(Source: Compiled by Researcher)

Table 6 shows that Kruskal Wallis test is significant with investment instruments namely NSC, PPF, Bank Deposits, PO Schemes, Insurance, Mutual Funds, ELSS, Bonds, Gold/Silver, Company Deposits, SIP, ULIP, Commodity, Live Stock, Real Estate, Chit Funds, Shares, and Credit Society. These instruments are significant at 95% confidence level. It means that above mentioned investment instruments show significant difference between different Socio Economic Classes.

Above test results are cross verified with Kruskal Wallis test.

Table 7: Kruskal Wallis Test between Investment Instruments

(n-710)

S.N	Investment Avenues	Chi-Square	d.f	Asymp. Sig.
1	NSC	36.35	11	0.00
2	PPF	61.80	11	0.00
3	Bank Fixed Deposits	139.93	11	0.00
4	PO Schemes	110.25	11	0.00
5	Government Securities	25.56	11	0.01
6	Insurance	75.76	11	0.00
7	Mutual Funds	127.53	11	0.00
8	ELSS	35.67	11	0.00
9	Debentures	25.53	11	0.01
10	Bonds	84.72	11	0.00
11	Gold/ Silver	80.09	11	0.00
12	Company Deposits	25.19	11	0.01
13	Systematic Investment Plan	53.89	11	0.00
14	ULIP	40.17	11	0.00
15	Commodity Market	60.59	11	0.00
16	NBFC Schemes	19.54	11	0.05
17	Live Stock	55.94	11	0.00
18	Real Estate	57.48	11	0.00
19	Chit Funds	15.34	11	0.17
20	Shares	108.96	11	0.00

S.N	Investment Avenues	Chi-Square	d.f	Asymp. Sig.
21	Forex Market	11.67	11	0.39
22	Private Equity Investments	10.68	11	0.47
23	Credit Society	51.69	11	0.00
24	Any Other	33.38	11	0.00

(Source: Compiled by Researcher)

Table 7 shows that Kruskal Wallis test is significant with investment instruments namely NSC, PPF, Bank Deposits, PO Schemes, Govt. Securities, Insurance, Mutual Funds, ELSS, Debentures, Bonds, Gold / Silver, Company Deposits, SIP, ULIP, Commodity, NBFC Schemes, Live Stock, Real Estate, Shares, and Credit Society. These instruments are significant at 95% confidence level. It means that there is significant difference between above mentioned investment instruments on the basis of Socio Economic Classes.

Following part shows classification of investment avenues on the basis of risk level. They are classified safer investment avenues and Riskier investment avenues.

Safe Investment avenues are NSC, PPF, Bank deposits, PO Schemes, Insurance, and Government Securities.

Following table shows ANOVA test between safer investment avenues and Socio Economic Classes.

Table 8: ANOVA Test between Safer Investment Avenues and Socio Economic Class

(n-710)

ANOVA					
Safer Investment avenues					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	433.452	11	39.405	.167	.999
Within Groups	14140.504	60	235.675		
Total	14573.956	71			

Source (Compiled by Researcher)

Table 8 shows that there is no significant difference between safer investment avenues on the basis of Socio Economic Class.

Similarly, following table narrates ANOVA Testing between riskier investment avenues.

Table 9: ANOVA Test between Safer Investment Avenues and Socio Economic Class

(n-710)

ANOVA					
Risky					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	140.42	11	12.766	.756	.683
Within Groups	3646.54	216	16.882		
Total	3786.97	227			

Source (Compiled by Researcher)

Table 9 shows that there is no significant difference between riskier investment avenues on the basis of Socio Economic Class.

Findings:

Spearman Rank Correlation reveals that there is significant difference between existing investment pattern of SEC E1 and SEC A1, A3, B1 and E2. There is moderate significance found between SEC D2 and SEC A1 and A3. Between SEC E1 and SEC A2 and B1, there is moderate significance between existing investments of respondents. (Table 1)

Future investment pattern of sample respondents on the basis of SEC are correlated. Moderate correlation found between SEC E3 and SEC A1, A2, A3 and B1. Also there is moderate correlation found in SEC E2 and SEC A2 and A3. (Table 2)

Spearman rank correlations between objectives behind investment on the basis of SEC are correlated. Difference found in objectives behind investment of SEC A1 and SEC D2, E1, E2 and E3. Moderate correlation found between SEC E1 and SEC A3, B1 and B2. Also there is moderate correlation found in SEC E2 and SEC A2 and A3. (Table 3)

Guiding factors behind investment on the basis of SEC are correlated. Moderate correlation found between SEC E3 and SEC A1, A2, A3, B1, B2 and C1. (Table 4)

Sources of Information availed by sample respondents on the basis of SEC are correlated. Moderate correlation found between SEC E3 and SEC A1, A2, and A3. Also there is moderate correlation found between SEC E2 and SEC A1, A2. (Table 5)

On the basis of Investment instruments, ANOVA model is significant with investment instruments namely NSC, PPF, Bank Deposits, PO Schemes, Insurance, Mutual Funds, ELSS, Bonds, Gold/Silver, Company Deposits, SIP, ULIP, Commodity, Live Stock, Real Estate, Chit Funds, Shares, and Credit Society. (Table 6 and Table 7)

In the process of classification of investment into safer and riskier investment avenues, there is no significant difference between safer investment

avenues and there is no significant difference between riskier investment avenues. (Table 8 and Table 9)

Suggestions:

Marketers of financial products should target all Socio Economic classes of the economy.

While targeting investors from lower Socio Economic Classes, Service providers should focus on designing products for the specific needs of the poor. The products should be low cost in order to increase take-up, and, where trade-offs must be made, low fees are more important than high interest rates. Marketers have to offer a range of products specifically designed to help people save for multiple purposes and to cope with emergencies. Also financial service providers' can facilitate access to accounts by subsidizing fees and offering add-on services like reminders to save.

Investors from middle Socio Economic Classes have major objectives as tax planning, retirement planning and financing children's education. Therefore, by considering these objectives, marketers have to offer a range of products to encourage household savings. While offering investment products, company should make people aware about the various investment options available in the market. Every client should be given a personnel assistance to give him/her a regular & consistent service.

While targeting investors from higher Socio Economic Classes, service providers should focus on diversified portfolio. Companies have to target their best customers, form close, personal relationships with them, and give them what they want i.e called Customized product.

Therefore, marketers have to understand these factors and accordingly target the customers.

Conclusion:

The study on people's choice in Investment Choices has been undertaken with the objective, to analyze the investment pattern of investors on the basis of Socio Economic Classes. Respondents

from all the Socio Economic Classes give more preference to invest in Insurance, NSC, PPF and Bank Deposit. Income level of a respondent is also an important factor which affects portfolio of the respondent. Middle age group, Lower income level groups respondents are preferred to invest in Insurance, NSC, PPF and bank deposit rather than any other investment avenues. The purpose of this study was to determine investment patterns on the basis of Socio Economic Class of investors. These type of studies are becoming roadmap to marketer of Financial instruments to design their investment products.

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