Vol. 15, Issue No. 2, April-June 2008

ISSN: 0971-5428

SOUTH ASIAN JOURNAL OF MANAGEMENT

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SOUTH ASIAN
JOURNAL OF MANAGEMENT

Vol. 15, Issue No. 2
April - June 2008

Editor
Mathew J. Manimala

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AMDISA
Adjacent to School of Management Studies
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Website : www.amdisa.org

This issue of the
South Asian Journal of Management
is being published with the courtesy of:
INSTITUTE OF PUBLIC ENTERPRISE
Osmania University Campus
Hyderabad-500 007
Andhra Pradesh, India

ISSN: 0971-5428

Printed by The Icfai University at M/s. ICIT Software Center Pvt. Ltd., # 1, Technocrat Industrial Estate, Balanagar 'X' Roads, Hyderabad - 500 037, Andhra Pradesh.

Contents

Brand Personality and its Impact on Brand Feelings: A Study Among Young Television Viewers

C V Rathnayake*

The purpose of this study was to investigate the brand personality's effect on brand feelings. The study measured brand personalities of three Sri Lankan television channels and investigated their impact on the viewers' brand feelings. A survey method was used for the study and the sample consisted of 166 young television viewers. The results proved that factors such as self-respect and sincerity associated with brand personalities of TV Channels were of greater importance to women than men. On the other hand, it was found that respondents in the secondary education level have more intense brand feelings than those having tertiary education. Further, the study revealed that sincere, and/or exciting brands exert a significant positive impact on the viewers' feelings of warmth, excitement, security and social approval. Further, it was recognized that brands with "competent" and/or "sophisticated" personalities generate feelings of self respect, social approval, and security.

INTRODUCTION

Work in brand personality has its foundations in personality psychology (Norman, 1963; Kassarjian, 1971; and Oliver, 1990) and has emerged as a popular metaphor for representing the way a consumer expresses his or her identity or ideal identity through a product selection. Aaker (1996) highlights that brand personality is one of the core dimensions of brand equity. According to Keller (1998), brand personality is concerned with how people attach a 'pseudo' human personality to the brand itself, rather than to what the brand does. When choosing among competing products, consumers assess the degree of similarity between the personality traits communicated by the product (Plummer, 1985) and the personality they wish to project of themselves (Zinkhan *et al*., 1996).

Brand personality has received considerable attention from marketing scholars, because the principal advantage of creating a brand personality is that it increases consumer preference and usage (Sirgy, 1982) and levels of trust and loyalty (Aaker, 1997). The clear delineation of brand personality, however, remains somewhat vague and indistinguishable from other constructs such as brand image or brand identity. Essentially, little is known about why

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consumers try to infuse human traits into brands (Freling and Forbes, 2005). Further, Freling and Forbes (2005) explain that there is a dearth of research that empirically demonstrates the utility of developing a strong, positive brand personality; that is, what is the effect that brand personality will have on consumer-related outcomes.

According to Aaker (1996), brands create emotional benefit, if the consumer experiences a feeling when buying or using brands. Thus, proper understanding of the impact of brand personality on brand feelings would provide important insight for marketers to revamp their brand management effort. However, it is difficult to find empirical evidences which reveal the impact that brand personality has on brand feelings. The purpose of this paper, therefore, is to present empirical evidence of brand personality's effect on brand feelings. The study measures brand personalities of three Sri Lankan television channels and investigates the nature and extent of the impact those personalities exert on the feelings that viewers have towards these brands. The study is conducted as a survey among Sri Lankan television viewers in the age grouped of 17-25 years, since the young audience is of greater importance for the media services such as television. The paper first provides a selective review of the brand personality literature to highlight the theoretical constructs used for the research. Then, an empirical analysis is provided to test the nature and extent of brand personality and feelings, and the impact that brand personality has on brand feelings. Finally, conclusions are drawn from a discussion of the findings in terms of their implications for marketing theory and practice.

BRAND PERSONALITY AND FEELINGS

The idea of product or brand personality can be traced back to its origins through the theory of symbolism (Ekinci and Hosany, 2006). It is argued that consumers view their preferred products as an extension of themselves, and therefore, their purchasing behavior is motivated by the symbolic value of the product (Mowen, 1990). Since, the concept of brand personality emerged three decades ago, there has been a burgeoning interest in the subject among the marketing academicians and practitioners (Levy, 1959; Kassarjian, 1971; Sirgy, 1982; Plummer, 1985; Duboff, 1986; Durgee, 1988; Ogilvy, 1988; Carr, 1996; and Aaker, 1997). Kassarjian (1971) noted that some dimensions of human personality might be mirrored in brands, whereas others might not. However, the applicability of these dimensions to brands remained unclear, stimulating Aaker (1997) to explore the contents of brand personality.

Aaker (1997) defined brand personality as "the set of human characteristics associated with a brand", (p. 347). To develop a conceptual framework to measure the personality of consumer brands, Aaker adapted the work of personality researchers in psychology who examined the 'Big Five', or five-factor, model (Tupes and Christal, 1958; Norman, 1963; McCrae and Costa, 1989; and John, 1990). This stream of research provides a means for measuring the perceptions of a brand, a method for differentiating a brand from its competitors, and a common denominator for marketing brands across market segments and sub cultures (Aaker, 1997). Aaker used the personality trait approach to study the perceived human characteristics of brands and measures the valence of these traits among the subjects. The end result of Aaker's study was a measure of brand personality that consisted of 42 traits and five dimensions: sincerity, excitement, competence, sophistication, and ruggedness. Follow-up analyses indicated that this five-factor structure was a reliable and valid measure of the symbolic attributes of brand personality across product categories and of the brands within a particular category (Aaker, 1997).

The author explained that brand personality is multidimensional, consisting of the above five dimensions: Sincerity is represented by attributes such as down-to-earth, real, sincere, and honest. Excitement is illustrated by traits such as daring, exciting, imaginative, and contemporary. Competence is characterized by attributes such as intelligent, reliable, secure, and confident. Sophistication is personified by attributes such as glamorous, upper class, good-looking, and charming. Finally, ruggedness is represented by traits such as tough, outdoorsy, masculine, and Western. Aaker (1997) suggested that the five dimensions of the Brand Personality Scale (BPS) were generic and could be used to measure brand personality across product categories and cultures.

Conversely, Azoulay and Kapferer (2003) criticized Aaker's (1997) brand personality concept definition as being too wide and loose. Alternatively, Azoulay and Kapferer (2003) propose a narrower and more precise definition: Brand personality is the set of human personality traits that are both applicable to and relevant for brands (p. 151). As a consequence of scale development, this definition necessitates steps identifying (a) only human personality traits (out of the more comprehensive collection of human characteristics, Aaker, 1997, p. 347) and (b) only those traits applicable to, and relevant for, brands. Further, Ferrandi *et al.* (2000) found partial structural and semantic correspondence with Jennifer Aaker's (1997) scale. They reduced the number of traits from 42 to 33 and found five dimensions: sincerity, dynamism, femininity, robustness, and conviviality.

Consumer researchers suggest that numerous benefits may accrue to brands with strong, positive brand personalities. A favorable brand personality is thought to increase consumer preference and usage (Sirgy, 1982), increase emotions in consumers (Biel, 1993), increase levels of trust and loyalty (Fournier, 1998), encourage active processing on the part of the consumer (Biel, 1992), and provide a basis for product differentiation (Aaker, 1996). Moreover, brand personalities, like human personalities, are thought to be comprised of traits that are relatively enduring. Moreover, a distinctive brand personality can help to create a set of unique and favorable associations in consumer memory, and thus build and enhance brand equity (Keller, 1993; Johnson, Soutar and Sweeney, 2000; and Phau and Lau, 2000). A well established brand personality influences consumer preference and patronage (Malhotra, 1981; and Sirgy, 1982) and develops stronger emotional ties (Biel, 1993) trust, and loyalty with the brand (Fournier, 1998).

On the other hand, according to Aaker (1996a, p. 97), brands create emotional benefits, if the consumer experiences a 'feeling' when buying or using brands. Emotional benefits add depth and value to the experience of owning, using or being in contact with a brand. Because of feelings' unique influence upon the rational evaluation of a brand, Goodchild *et al.* (2001) describe the emotional benefits as 'the heart of a brand'. If the consumer chooses brands with the heart, this is because of the emotional benefits. When a logical solution for the problem is not immediately at hand and a decision must be made, the more emotional evaluations becomes significant—sometimes interacting with the rational evaluations (Martesen and Gronholdt, 2004). As Franzen and Bouwman (2001, p. 33) write, "the emotional brain [is] thus just as involved in our decision-making process as the rational brain". They operate in close interaction with one another, intertwining their two ways of knowing in order to lead us through life. According to Keller (2004), brand feelings are customers' emotional responses and reactions with respect to the brand. Brand feelings also relate to the social currency evoked by the brand. He explains that there are six important types of brand feelings: warmth, fun, excitement, security, social approval and self-respect (Keller, 2004).

Considerable efforts have been expended in investigating and applying the aspects of branding of services. Service brands and their personalities are of greater importance for the researchers and the concept of brand personality is widely used in services branding practices in numerous services settings ranging from tourist hotels, banks, destinations and financial services to education. Back and Lee's (2003) application of Aaker's J (1997) framework in upper scale hotel industry provides a good support for four dimensions of brand personality—sincerity, excitement, competence, and sophistication. Ekinci and Hosany (2006) also tested the validity of Aaker's J (1997) brand personality scale to assess its applicability to tourism destinations. Siguaw *et al.* (1999) study is another study of brand personality in the context of hospitality and tourism. The authors investigated the brand personality of three broad categories of restaurants: quick service, casual dining, and upscale restaurants. Aaker's (1997) brand personality scale was used to gauge the respondents' perceptions of nine restaurants, three in each category. The findings revealed that restaurants could be differentiated on the basis of personality characteristics. Moreover, according to Henderson (2000), brands are traditionally associated with consumer goods, but promoters of destinations are increasingly adopting the technique. Murphy *et al.* (2007) highlight that, in most published accounts of the destination branding process, desired brand personality characteristics are identified. He explains that brand personality is often presented as a key component of an effective brand and it is central to the destination-branding model presented in his study. Further, Henderson (2000) discusses the

New Asia–Singapore branding process and identifies six personality characteristics comprising the brand: cosmopolitan, youthful, vibrant, modern Asia, reliability, and comfort. However, it is difficult to find empirical evidences which reveal the impact the brand personality has on brand feelings. Specially, the studies which investigate the personality aspects of television brands and its impact on viewers' feelings towards the brands, are rare to be found. Therefore, a comprehensive investigation into the impact of personality of television brands on brand feelings would provide important guidelines for the brand managers to develop their branding strategies.

METHODOLOGY

Brands obviously do not have objective personality traits independent of a consumer's perception of them. Instead, a brand's personality is a hypothetical construct developed by the consumer (Sung and Spencer, 2005). Thus, the study was designed to measure the dimensions of the customers' perception of the personality of the brand and then examine the relationship that such personality has with the feelings customers have towards the brand. There, the study used the 'Big five' dimensions of brand personality (Aaker, 1997) as the measures of brand personality. Aaker (1997) highlighted that this five-factor structure is a reliable and valid measure of the symbolic attributes of brand personality of the brands within a particular category. Although some studies on the application and validation of Aaker's (1997) brand personality scale reveal the emergence of culturally specific dimensions, the brand personality scale remains the most stable, reliable, and comprehensive measure to gauge the brand/product personality (Ekinci and Hosany, 2006). Further, since it has been widely used in services research, it was judged to be a reliable measure to investigate the personality of television brands. On the other hand, the six types of brand feelings explained by Keller (2004) were used as measures of brand feelings in the study.

The study was based on these two types of theoretical measures as they provide a valid conceptual basis to examine the relationships among them. Therefore, the research focused on examining nature, extent and the relationships between each of the measures of brand personality and feelings. Accordingly, the following hypothesis were tested in the study

H_1: *Gender has a positive effect on brand personality of television channels.*

H_2: *Gender has a positive effect on brand feelings for television channels.*

H_3: *Level of Education has a positive effect on brand personality of television channels.*

H_4: *Level of Education has a positive effect on brand feelings for television channels.*

H_5: *Brand personality exerts a positive influence on brand feelings.*

The study used five measures of brand personality and seven measures of brand feelings to test the above hypothesis. Thus, in testing each hypothesis, the nature,

Table 1: Measures and Indicators

Measures		Label	Indicators
Brand Personality	Sincerity	BP_1	Down-to-earth, Honest, Wholesome, Cheerful
	Excitement	BP_2	Daring, Spirited, Imaginative, Up-to-date
	Competence	BP_3	Reliable, Intelligent, Successful
	Sophistication	BP_4	Upper Class, Charming
	Ruggedness	BP_5	Outdoorsy, Tough
Brand Feelings	Warmth	BF_1	Sentimental, Warm hearted, Affectionate
	Fun	BF_2	Amusing, Joyous, Cheerful
	Excitement	BF_3	Energizing, Special
	Security	BF_4	Safety, Comfort
	Social Approval	BF_5	Acknowledgement
	Self Respect	BF_6	Pride, Accomplishment

extent and relationship between each measure of brand personality and feelings were assessed. Table 1 shows the measures and indicators used for the study.

DATA COLLECTION AND THE QUESTIONNAIRES

Survey method was used as the main research method for the study. The sample of the study was drawn randomly and consisted of 166 respondents in the age group of 17-25 (Table 2). It was drawn from the General Certificate of Education (GCE) Advanced Level students in Matara District, who are in the Business Studies and Arts streams and the undergraduates in the third year at the Faculties of Management and Finance and Humanities and Social Sciences, University of Ruhuna. Young viewers are very important for television brands, and in Sri Lanka, all the television channels pay a considerable attention on young viewers. The attention

Table 2: Sample Demographics

Brand	Level of Education	Gender		Total
		Male	Female	
Sirasa TV *(Brand 01)*	Secondary	16	17	33
	Tertiary	13	13	26
	Total	**29**	**30**	**59**
National Television *(Brand 02)*	Secondary	11	13	24
	Tertiary	14	13	27
	Total	**25**	**26**	**51**
ITN *(Brand 03)*	Secondary	10	12	22
	Tertiary	17	17	28
	Total	**27**	**29**	**56**

paid to young viewers has been increased tremendously with the high competition among the Sri Lankan television brands. During the last five years many new types of television programs such as reality programs, musical programs, teledrama and sports programs were designed specifically for youngsters. As a result, youngsters are a very important group of viewers for the branding decisions of Sri Lankan televisions today.

Initially, a pretest was done considering five brands using 30 respondents in the selected age category and three brands (Sirasa TV, National Television and ITN) were selected due to their suitability for the study. These three channels have a considerably high share of the audience (Sirasa TV-51.71%, National Television-65.25%, and ITN- 44.58%) (www.cpalanka.org,2008). All these channels place a great emphasis on the young audience and allocate a significant amount of time for the programs designed for this group. Specifically, Sirasa TV mainly focuses on entertainment and it is the channel, which offers the highest number of programs targeted at young viewers. National Television is one of the state-owned channels which keeps a balance between entertainment, informational and educational programs and has the highest share of the Sri Lankan viewers. ITN is the oldest television channel in Sri Lanka and it focuses on keeping the balance between providing information, entertainment and education to the viewers. National Television and ITN also have been able to attract a significant amount of young viewers.

About 175 questionnaires were distributed among the respondents and 166 questionnaires were selected due their suitability for the study. The sample represented the viewers of three Sri Lankan television channels, namely, Sirasa TV (Brand 01), National Television (Brand 02) and ITN (Brand 03), in the age group 17-25 years. Three structured questionnaires were designed for data collection, and were administered among the respondents. All the questionnaires were designed in a similar format and each consisted of three sections. First section consisted of three general demographic questions. The second section was focused on examining the dimensions of brand personality and consisted of 15 questions representing each indicator of the measures of brand personality. The last section of the questionnaire was designed to examine the nature and extent of the feelings that respondents have towards each brand and consisted of 13 questions to measure the extent of brand feelings. The questionnaire contained a seven-pint scale: 1 = strongly disagree to 7 = strongly agree to measure the extent of respondents' perception.

DATA ANALYSIS

The data analysis attempted to examine the personalities and feelings of each of the brand, and then, compare the brand personality with the feelings that viewers have towards each brand. The data analysis was conducted through two studies. In the first study, the differences in brand personalities and feelings within the sample were analyzed based on the gender and level of education. In the second study, the correlation matrices were constructed for each brand to explore whether there are significant relationships between the brand personality and brand feelings. There, the significance of relationships was measured at two levels (0.05 and 0.01). The study then selected the relationships common to the selected brands and reached at the conclusions based on such relationships.

RESULTS AND DISCUSSION

The data gathered from the survey was analyzed to ascertain the impact of brand personality on the brand feelings. First, the study examined the differences in brand personalities and feelings within the samples based on the gender and level of education. Second, the correlation between each of the measures of brand personality and feelings for each brand was calculated and the significant relationship and the degree of the relationship were identified. The internal consistency of the study constructs were measured based on the Cronbach's Alpha.

Table 3 shows the Cronbach's Alpha of the brand personality and feelings. Accordingly Cronbach's Alpha for each indicator is around 0.8 and it reflects a higher level of internal consistency of the attribute measures of brand personality and feelings. The overall Cronbach's Alpha also was around 0.85.

STUDY I: BRAND PERSONALITY AND FEELINGS

The study I of the research was focused on explaining the nature and extent of the brand personality and feeling for the selected brands. Mean ranks, and Mann-Whitney *U* statistics were

Table 3: Cronbach's Alpha of Measures of the Brand Personality and Feelings

Measure	Cronbach's Alpha if Item Deleted	Indicator	Cronbach's Alpha if Item Deleted
Brand Feelings	0.860	Warmth	0.858
		Fun	0.875
		Excitement	0.847
		Security	0.852
		Social Approval	0.872
		Self Respect	0.847
Brand Personality	0.845	Sincerity	0.848
		Excitement	0.860
		Competence	0.854
		Sophistication	0.866
		Ruggedness	0.882

estimated to measure the dimensions of brand personality and feelings. The study measured the differences between each of the attribute measure based on the gender and level of education.

Table 4: Mean Ranks and Mann-Whitney Test Statistics for Brand Feelings[a]

	Measure	Gender	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig. (2-tailed)
Brand Feelings	BF_1	Female	51.20	2713.50	1208.500	0.797
		Male	49.71	2336.50		
	BF_2	Female	46.54	2466.50	1035.500	0.145
		Male	54.97	2583.50		
	BF_3	Female	55.15	2923.00	999.000	0.084
		Male	45.26	2127.00		
	BF_4	Female	54.42	2884.00	1038.000	0.148
		Male	46.09	2166.00		
	BF_5	Female	49.08	2601.00	1170.000	0.596
		Male	52.11	2449.00		
	BF_6	Female	57.42	3043.50	878.500	0.011
		Male	42.69	2006.50		

Note: [a] Grouping Variable: Gender.

BRAND PERSONALITY AND FEELINGS: GENDER DIFFERENCES

The test results given in Table 4 show the mean ranks and Mann-Whitney statistics for the brand feelings of respondents towards all three brands, based on the gender. Accordingly, it was found that almost similar mean ranks of BF_1 (warmth), BF_2 (fun), BF_3 (excitement), BF_4 (security), and BF_5 (social approval) for males and females and this reflects that males and females have similar feelings towards the selected brands along these dimensions. Moreover, according to the *U* test statistics, it was evident that there were no significant difference between these mean ranks ($p>0.05$). However, mean ranks of BF_6 (self respect) were different between males and females and the relevant U test statistics showed that it was significant ($p<0.05$). The results revealed that females have more self-respect from these brands than males.

Mean ranks and Mann-Whitney test statistics, based on the gender, for the brand personality is depicted by Table 5. The results revealed that there was a significant difference between the mean ranks of males and females for BP_1 (sincerity). The relevant Mann-Whitney statistic shows that these differences are significant ($p<0.05$). The relevant mean ranks (Table 5) showed that for females, the brands have been more sincere than for men. Moreover, it was found that the mean ranks for BP_2 (excitement), BP_3 (competence), BP_4 (sophistication), and BP_5

(ruggedness) were not different between males and females. It shows that the personality of the selected brands is not different between males and females for these indicators.

Consequently, H_1 and H_2 are accepted based on the analysis above and it can be concluded that gender has an effect on brand personality and feelings. Specifically, females feel more self respect for being the viewers of these channels, and they perceive the brands to be more sincere. This is due to the fact that, in all these three channels, females are targeted more than males and most of the programs are designed for females.

Table 5: Mean Ranks and Mann-Whitney Test Statistics for Brand Personality[a]

	Measure	Gender	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig. (2-tailed)
Brand Personality	BP_1	Female	57.52	3048.50	873.500	0.010
		Male	42.59	2001.50		
	BP_2	Female	53.26	2823.00	1099.000	0.310
		Male	47.38	2227.00		
	BP_3	Female	52.89	2803.00	1119.000	0.380
		Male	47.81	2247.00		
	BP_4	Female	52.07	2759.50	1162.500	0.562
		Male	48.73	2290.50		
	BP_5	Female	46.29	2453.50	1022.500	0.120
		Male	55.24	2596.50		

Note: [a] Grouping Variable: Gender.

BRAND PERSONALITY AND FEELINGS: EDUCATIONAL DIFFERENCES

Table 6 shows the Mann-Whitney statistics and the mean ranks of the brand feelings of respondents towards all three brands, based on the level of education. Accordingly, it was found that almost similar mean ranks of BF_2 (fun), BF_3 (excitement), and BF_6 (self respect) for the two levels of education concerned. However, as per the test statistics, it was evident that there are significant differences for BF_1 (warmth), BF_4 (security), and BF_5 (social approval) between two educational levels ($p < 0.05$). The relevant mean ranks show that the respondents in the secondary education level have more intense brand feelings than those who have tertiary education.

The mean ranks and Mann-Whitney statistics of the brand personality, based on the level of education, is given in Table 7. The test results reveal that there are no significant differences in brand personalities between the secondary and tertiary education levels.

Accordingly, H_3 and H_4 are accepted and it is evident that education has a significant effect on brand personality and feelings of this group of respondents. It was evident that respondents with secondary education have more strong

Table 6: Mean Ranks and Mann-Whitney Test Statistics for Brand Feelings[a]

	Measure	Level of Education	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig. (2-tailed)
Brand Personality	BF_1	Secondary	56.56	2828.00	947.000	0.036
		Tertiary	44.44	2222.00		
	BF_2	Secondary	54.40	2720.00	1055.000	0.177
		Tertiary	46.60	2330.00		
	BF_3	Secondary	52.14	2607.00	1168.000	0.567
		Tertiary	48.86	2443.00		
	BF_4	Secondary	60.66	3033.00	742.000	0.000
		Tertiary	40.34	2017.00		
	BF_5	Secondary	59.93	2624.50	778.500	0.001
		Tertiary	41.07	2425.50		
	BF_6	Secondary	52.64	2632.00	1150.500	0.489
		Tertiary	48.36	2418.00		

Note: [a] Grouping Variable: Level of Education.

Table 7: Mean Ranks and Mann-Whitney Test Statistics for Brand Personality[a]

	Measure	Level of Education	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig. (2-tailed)
Brand Personality	BP_1	Secondary	52.64	2632.00	1143.000	0.459
		Tertiary	48.36	2418.00		
	BP_2	Secondary	53.57	2678.50	1096.500	0.288
		Tertiary	47.43	2371.50		
	BP_3	Secondary	52.69	2634.50	1140.500	0.448
		Tertiary	48.31	2415.50		
	BP_4	Secondary	54.43	2721.50	1053.500	0.171
		Tertiary	46.57	2328.50		
	BP_5	Secondary	54.98	2749.00	1026.000	0.119
		Tertiary	46.02	2301.00		

Note: [a] Grouping Variable: Level of Education.

feeling towards the selected brands. The program composition may cause this difference, and in all these channels primary attention is paid on entertainment rather than positioning as an educational channel. Therefore, the channels have been less attractive for more educated group of respondents.

STUDY II: IMPACT OF BRAND PERSONALITY ON BRAND FEELINGS

Table 8 depicts the correlation matrix for the Brand 01. The matrix shows the relationship between the indicators of brand personality (BP_1, BP_2, BP_3, BP_4, and BP_5) and brand feelings (BF_1, BF_2, BF_3, BF_4, BF_5, and BF_6). Accordingly, it was found that BP_1 (sincerity) is positively correlated with BF_1 (warmth), BF_3 (excitement), BF_4 (security) and BF_5 (social approval) respectively ($P<0.01$). Further, it was revealed that BP_2 (excitement) has significant positive relationship with BF_1 (warmth), BF_2 (fun), BF_3 (excitement) ($P<0.01$). Moreover, as per the test results, BP_3 (competence) and BP_4 (sophistication) are positively correlated with BF_4 (security), BF_5 (social approval), and BF_6 (self respect) respectively. The correlation coefficients show that the relationships are significant ($P < 0.01$ for all the relationships except for BP_4 and BF_5. The relationship between BP_4 and BF_5 is significant at 0.05).

Table 8: Brand Personality and Brand Feelings Correlations Matrix—Brand 01

		BF_1	BF_2	BF_3	BF_4	BF_5	BF_6
BP_1	Correlation	0.622**	0.322	0.758**	0.687**	0.633**	0.304
	Sig. (2-tailed)	0.011	0.068	0.004	0.032	0.020	0.000
BP_2	Correlation	0.503**	0.492**	0.542**	0.390	0.351	0.487
	Sig. (2-tailed)	0.003	0.004	0.001	0.184	0.001	0.000
BP_3	Correlation	0.375	0.386	0.268	0.666**	0.540**	0.685**
	Sig. (2-tailed)	0.000	0.054	0.061	0.002	0.001	0.040
BP_4	Correlation	0.134	0.291	0.107	0.718**	0.415*	0.649**
	Sig. (2-tailed)	0.101	0.094	0.058	0.007	0.016	0.005
BP_5	Correlation	0.367	0.266	0.266	0.237	0.397	0.294
	Sig. (2-tailed)	0.136	0.134	0.606	0.183	0.062	0.097

Note: Significant at ** $P < 0.01$ and * $P < 0.05$.

Table 9 shows the correlations between the measures of brand personality and feelings for the Brand 02. Accordingly, the results revealed that BF_1 (warmth), BF_3 (excitement) BF_4 (security) and BF_5 (social approval) have significant positive relationships with BP_1 (sincerity) ($P<0.01$ for all the relationships except for BF_5. The relationship between BP_1 and BF_5 is significant at 0.05). Further, it was found that BP_2 (excitement) is positively correlated with BF_3 (excitement) and BF_4 (security) for brand 02. The relevant correlations showed that the relationships are significant ($p<0.01$) (Table 5). In the same way, BP_3 (competence) had significant positive relationships with BF_3 (excitement) and BF_4 (security) respectively ($P<0.01$). Moreover, the correlation coefficient revealed that BP_4 (sophistication) is positively related with BF_6 (self respect) ($P < 0.01$). The study results further revealed that BP_5 (ruggedness) is positively related with BF_2 (Fun) for the Brand 02 ($P < 0.01$).

Table 10 depicts the correlations matrix for the Brand 03. It was found that BP_1 (sincerity) is positively correlated with BF_3 (excitement) and BF_6 (self respect) for the Brand 03. The relevant statistics reflected that the relationships are significant

Table 9: Brand Personality and Brand Feelings Correlations Matrix—Brand 02

		BF_1	BF_2	BF_3	BF_4	BF_5	BF_6
BP_1	Correlation	0.489**	0.143	0.728**	0.610**	0.405*	–0.095
	Sig. (2-tailed)	0.005	0.435	0.011	0.003	0.021	0.603
BP_2	Correlation	0.209	0.073	0.527**	0.549**	0.135	0.026
	Sig. (2-tailed)	0.252	0.692	0.002	0.001	0.463	0.886
BP_3	Correlation	0.404	0.031	0.645**	0.584**	0.280	–0.234
	Sig. (2-tailed)	0.062	0.867	0.050	0.031	0.120	0.197
BP_4	Correlation	0.311	–0.097	0.270	0.263	0.244	0.623**
	Sig. (2-tailed)	0.084	0.599	0.135	0.146	0.179	0.013
BP_5	Correlation	0.092	0.478**	0.111	–0.022	0.018	0.029
	Sig. (2-tailed)	0.615	0.006	0.544	0.905	0.921	0.915

Note: Significant at ** P < 0.01 and * P < 0.05.

Table 10: Brand Personality and Brand Feelings Correlations Matrix—Brand 03

		BF_1	BF_2	BF_3	BF_4	BF_5	BF_6
BP_1	Correlation	0.283	0.139	0.509**	0.212	0.199	0.625**
	Sig. (2-tailed)	0.099	0.425	0.002	0.223	0.252	0.045
BP_2	Correlation	0.138	0.175	0.697**	0.138	–0.119	0.341*
	Sig. (2-tailed)	0.430	0.314	0.026	0.428	0.498	0.045
BP_3	Correlation	0.096	–0.099	0.244	–0.046	–0.055	0.487*
	Sig. (2-tailed)	0.584	0.570	0.157	0.793	0.754	0.022
BP_4	Correlation	–0.186	0.143	0.154	0.343*	0.366*	0.214
	Sig. (2-tailed)	0.285	0.414	0.379	0.043	0.031	0.643
BP_5	Correlation	0.115	–0.171	0.327	0.269	0.495**	–0.022
	Sig. (2-tailed)	0.511	0.326	0.055	0.118	0.003	0.902

Note: Significant at ** P < 0.01 and * P < 0.05.

($P<0.01$) (Table 6). Further, the study results disclosed that BP_2 (excitement) also is positively correlated with BF_3 (excitement) and BF_6 (self respect). As per the statistics, the relationship between BP_2 and BF_3 is significant at 0.01 and the relationship between BP_2 and BF_6 is significant at 0.05. In addition, there was a significant positive relationship between BP_3 (competence) and BF_6 (self respect) for the Brand 03 ($P<0.05$). The correlation coefficients for the brand personality and brand feelings for the Brand 03 further showed that BP_4 (sophistication) is positively related with BF_4 (security) and BF_5 (social approval) respectively ($P<0.05$). Finally, the results showed that BP_5 (ruggedness) has a significant positive relationship with BF_5 (social approval) ($P<0.01$).

Test results given in Tables 8, 9 and 10 show that there are no negative relationships between any of the measures of brand personality and feelings. The test results prove that there is are significant positive relationships between the measures of brand personality and feelings Accordingly, H_5 of the study is accepted and it is concluded that brand personality of television channels exerts a positive impact on brand feelings of the viewers. The study found the highest number of correlations between the study measures for Brand 01. Possibly, it is the result of perception of Sirasa TV as an entertaining channel, and the channel, which offers the highest number of programs for the young viewers. On the other hand, a considerable number of relationships were found for National Television. It might be due to the fact that this channel has the highest share of audience and is popular for keeping the balance between entertainment, education, news and information.

CONCLUSION

Having studied a group of young television viewers of Sri Lanka, this study examines the nature and extent of impact of brand personality on the brand feelings of the customers. The results of the analysis provide several important insights to understand the impact that brand personality has on the brand feelings. Moreover, higher levels of internal consistency of the study constructs considered were established by Cronbach's alpha. In study I, the results revealed that females have more self-respect from these brands than males. Further, it was found that, for females, the brands have been more sincere than for men. On the other hand, it was found that the respondents in the secondary education level have more intense brand feelings than those who have tertiary education. Therefore, the study recommends that creating sincerity and self-respect in the minds of female consumers is easier compared to male consumers. Further, the study concludes that if a brand manager wishes to generate desired brand feelings in the customers' mind, he has to pay more attention on customers in the tertiary education level.

In study II, it was found that BP_1 (sincerity) and BP_2 (excitement) exert a positive impact on BF_3 (excitement) respectively for all three channels. Thus, it provides an important guideline for the brand managers to position their brand. That is, if a brand manager wants to make his consumers excited, his brand should be 'sincere' and 'exciting'. Further, the test results revealed that BP_1 (sincerity) is positively related with BF_1 (warmth), BF_4 (security) and BF_5 (social approval) for two channels. Therefore, it is concluded that the brands, which are perceived to be sincere by the consumers, will elicit warm feelings among the consumers. Further, it is concluded that the sincere brands will create feelings of security and social approval within the consumer. Therefore, it is recommended that the brand managers need to focus their brand management effort to construct a sincere brand if they need their customers to feel excited, warmed, secured and socially approved by the brand. Specifically, since a brand is a symbolic device, proper and careful design of a brand to build up a sincere/exciting personality will elicit the expected feelings within the customers, and therefore, will facilitate the category membership for the brand. Further, the test results showed that BP_2 (excitement), as a dimension of personality, exerts a significant positive impact on BF_1 (warmth), BF_2 (fun), and BF_4 (security). Thus, it is concluded that brands, which are perceived to be exciting, will create the feelings of warmth, fun and security within the consumer. This provides another guideline for the brand management practitioners for the positioning of their brands. Here, it is noteworthy that if a business organization wants to feel excited, pleased and safe, their brand needs to be inclined towards being 'exciting'.

On the other hand, the findings show that BP_3 (competence) and BP_4 (sophistication) have a significant positive relationship with BF_4 (security) respectively for two brands. Similarly, as per the study results, BP_3 (competence) and BP_4 (sophistication) exert a significant positive impact on the BF_6 (self respect). It shows that the competent and sophisticated brands elicit feelings of self-respect and security within the customers. Thus, the study recommends that creating a competent and/or a sophisticated brand will create customers who feel safe with the brand and feel their preference as a respect.

The study finally highlights that the brand management practitioners should carefully construct a brand along the dimensions of personality so that the brand generates expected feelings among the consumers. The study provides empirical evidences on the nature of the relationship between brand personality and brand feelings. Therefore, the study recommends that identifying and establishing brand positioning and values, planning and implementing brand marketing program, and all other aspects related to brand management should be implemented with a careful understanding of the brand's personality and its impact on the brand feelings.

Nevertheless, a generalization of the study results needs to be done carefully since the results might be influenced by sample size, composition and the selected services category. Thus, further research should be conducted based on the directions given by the present study. In future research, it may be necessary to extend the study to investigate the impact of demographics on the brand personality and feelings, nature of brand feelings and personality of the brands across different industries and cultures. Based, on them a complete test needs to be conducted to explain the suitability of the present results for the application in strategic brand management in business organizations.

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The Relationship Between Price Volatility, Trading Volume and Market Depth: Evidence from an Emerging Indian Stock Index Futures Market

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This paper examines the relationship between futures trading activity and price volatility in the Indian stock index futures market. The study used both volume and open interest to separate hedger's trading activity from speculators and day traders. Volume gives a measure of speculative activities whereas open interest is a measure of hedging positions. The data consists of daily closing price, volume and open interest of Nifty index futures from the period January 1, 2001 to June 28, 2007. The study investigates whether the effect of trading activity on volatility is homogeneous by separating volume and open interest into its expected and unexpected components and allowing each component to have a separable effect on observed price volatility by following appropriate ARMA-GARCH and ARMA-GJR-GARCH models. Futures price volatility is positively related to both the expected and unexpected components of volume. However, unexpected volume has a greater impact on volatility than expected volume. Volatility is negatively related to the expected level of open interest and the coefficient of unexpected component of open interest is statistically insignificant. A significant negative coefficient of expected open interest could be interpreted as: Higher expected level of open interest leads to lower futures price volatilities and a more stable futures market. This contributes to the literature on the microstructure of Indian futures markets by investigating the empirical relationship between trading volumes and volatility.

INTRODUCTION

The study of price volatility and trading volume is motivated by the desire of traders to identify the sources of meaningful information as it enters into financial markets. Investigating the relationship among information, volume, volatility and return is usually the starting point to understand the financial market and central to the market microstructure literature. It is directly related to the role of information in price formation and provides measures on how the market information is reflected in trading. In the finance literature, it is widely acknowledged that trading in assets

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markets is mainly induced by the arrival of new information and subsequent revisions of expectation by investors. When new information on the market arrives, agents react by trading until prices reach a revised and post-information equilibrium. Trade occurs both in response to the arrival of new information on the asset's value itself and as risk averse agents engage in hedge rebalancing trades. Hedgers are motivated to trade in futures contracts to stabilize their future income flow or cost. Similarly, speculators take interest in futures contacts based upon their expectations of futures prices volatility.

There are many reasons why financial markets pay attention to trading volume, primarily its use as a proxy for liquidity or as a measure of information flow. A significant number of papers document a positive contemporaneous relationship between volume of transactions in financial markets and the volatility of returns, as determined by a variety of measures. Karpoff (1987) listed four reasons why the price-volume relationship is important: Firstly, it provides insight into the structure of financial markets. Secondly, it is important for event studies that use a combination of price and volume data from which to draw inferences. Thirdly, it is critical to the debate over the empirical distribution of speculative markets. Fourthly, price-volume relationships have significant implications for research into futures markets. Volume of trading is an important statistics that are routinely released in the media to report on the status of financial markets and are closely monitored by investors. Market participants believe that intrinsic knowledge of price changes and trading volume will enhance their understanding of the market dynamics and thus, their financial success. The futures exchanges and regulatory agencies use volume data to measure the growth or decline of the futures contracts. Also, as exchanges research for the possible introduction of a new type of futures contracts, the potential futures volume of trade in such a contract receives primary attention as proxy for the contracts liquidity. In addition to exchanges and regulatory agencies being interested in the behavior of the volume of trading, traders themselves pay attention to trading volume. Low volume usually implies that the market is illiquid and the bid/asks spread will tend to be large, resulting in high price volatility. Such a market will discourage hedgers, but may benefit speculators. On the other hand, high trading volume contributes to high liquidity and the bid/asks spread will tend to be small, resulting in low price variability. Hedgers prefer low day-to-day volatility while speculators usually do not, because low volatility reduces speculators' profits.

A distinguishing feature of futures markets is that the number of contracts in existence is endogenously determined at each point of time. Open interest data provides an additional measure of trading activity. Open interest is the sum total of all outstanding long and short positions of futures contracts that have not been closed out. Several ostensibly related views have emerged on the economic role of open interest. Specifically, open interest has been used as proxy for hedger's opinions (Kamara, 1993), hedging demand (Chen *et al.*, 1995), market depth (Bessembinder and Seguin, 1993) and difference in trader's opinions (Bessembinder *et al.*, 1996). By monitoring the changes in the open interest figures at the end of each trading day, some conclusions about the day's activity can be drawn. Increasing open interest means that new money is flowing into the market, while declining open interest means that the market is liquidating and implies that the prevailing price trend is coming to an end. Volume and open interest data provides insights into the effects of market activity on futures price and distinguishing effects that are generated by trading off speculators (who are informed) or hedgers (who are uninformed). Volume is suitable to capture the daily activity of a particular group of traders who trades with a short, instant time frame; it may well serve as the proxy for the trading behavior of day traders/speculators. Open interest measures the hedgers' trading activity. Open interest measures are pertinent for at least two reasons. First, since many speculators are 'day traders' who do not hold open positions overnight, open interest as of the close of trading, likely reflects primarily hedging activity and thus, proxies for the amount of uninformed trading.

In general, two famous competing hypotheses can be put forward inexplaining volume-volatility relationship. They are: 'Mixture of Distribution Hypothesis' (MDH) and the 'Sequential Information Arrival Hypothesis' (SIAH). According to MDH (Clark, 1973; Epps and Epps, 1976; and Tauchen and Pitts, 1983), returns are generated by mixture of distribution in which the rate of information arrival is the common directing or mixing variable. Return series can be viewed as stochastic process, conditional on the information inflow, with changing second moment reflecting the intensity of information arrival. So when new and unexpected information arrives, both volatility and volume change contemporaneously and positively to new information. Copeland's (1976) SIAH postulates that new information is disseminated sequentially to traders and traders who are not yet informed, cannot perfectly infer. Consequently, the sequential arrival of new information to the market generates both trading volume and price movements, with both increasing during periods characterized by numerous information shocks. Hence, SIAH suggests that lagged values of volatility may have the ability to predict current trading volume and vice-versa. So, both MDH and SIAH support a positive and contemporaneous relationship between volume and returns volatility. There are a number of studies of the volatility-volume relationship for equity and futures. Cornell (1981), Grammatikos and Saunders (1986), Ragunathan and Peker (1997), Gwilym, McMillan and Speight (1999) find the evidence of positive relationship between price volatility and trading volume. So these studies clearly support the theoretical prediction of a positive and contemporaneous relationship between volume and volatility.

While the relationship between volatility and volume in equities has been investigated in an enormous volume, less attention has incorporated market depth in the analysis of asset volatility even though market depth may be fundamentally important in relation with trading activity and return volatility. As argued by Tauchen and Pitts (1983), returns volatility, trading volume and market depth are closely related. But research has not been fully developed due to the inconsistent and narrow definition of depth. However, Kyle's (1985) definition of depth has been used by most researchers (Bessembinder and Seguin, 1992; and Fung and Patterson, 2001). According to Kyle, market depth is defined as the order flow required to move prices by one unit. As order flow changes, open interest also changes endogenously, thus it makes it a good measures of market depth.

This study contributes to the literature on the relationship between futures price volatility and trading activity in the many respects. To the best of our knowledge, no empirical study has been undertaken to examine the volume effect on futures prices volatility in the Indian context. The study investigates whether the effect of volume on volatility is homogeneous by separating volume into its expected and unexpected components and allowing each component to have a separable effect on observed price volatility. The study employs a volatility measure consistent with the return distribution of the stock index futures investigated. The conditional variance from Bollerslev's (1986) Generalized Autoregressive Conditional Heteroskedasticity (GARCH) model is found to be the appropriate proxy of volatility of the futures prices.

The rest of the paper is structured as follows: After making a study on the relationship between futures price volatility and trading activity, the paper gives a review of theoretical and empirical studies on volume-volatility relationship. Next, it describes the structures of National Stock Exchange market and presents the sources and preliminary analysis of the data. Then, it describes the econometric models, methodology and some theoretical considerations. Thereafter, the empirical results are presented. In the end, the paper summarizes the findings of the study and provides some concluding remarks.

REVIEW OF LITERATURE

THEORETICAL INVESTIGATION

There are two groups of theories that explain the volume-volatility relation. The first is called information theories, i.e., MDH and the SIAH. In these theories, information is the driving force that determines both volume and volatility information theories. The second category is the argument for the dispersion of beliefs/expectations, as explained by Harris and Raviv (1993), and Shalen (1993).

MIXTURE OF DISTRIBUTIONS HYPOTHESIS (MDH)

The MDH states that the volume-volatility relation originates from a joint dependence on a common event or variable, i.e., rate of information arrival (Clark, 1973; Epps and Epps, 1976; Tauchen and Pitts, 1983; and Harris, 1987). The model assumes that information dissemination is contemporaneous. The extension of the MDH by Tauchen and Pitts (1983) argues that information arrival causes traders to revise their asset valuations, such that the greater the disagreement between traders, the larger the volume generated. Epps and Epps (1976) also developed a model in which both volume and volatility are positive function of the amount of disagreement among traders generated by information arrival, and implies positive causal relation from volume to return and, hence volatility. When new and unexpected information arrives, market participants revise their expectations of futures prices regarding the true (equilibrium) price. As a result, both futures price and trading volume change contemporaneously to this new information. Again informational arrival may be random, deterministic or seasonal. Hence, price volatility may be changing over time. Thus, the rate of flow of information may be random over the contract's length. The rate of flow of variable (price expectation change) information may be maturity dependent. This implies that the unconditional joint distribution of futures price volatility and volume is mixed normal distribution, with the distribution of directing variable, informational arrival, determining the mixtures of the conditional normal distributions.

SEQUENTIAL INFORMATION ARRIVAL HYPOTHESIS (SIAH)

Copeland (1976), Morse (1980), Jennings *et al.* (1981) and Jennings and Barry (1983) develop and extend the sequential arrival of information model. According to this model, new information is disseminated sequentially to traders, and traders who are not yet informed, cannot perfectly infer the presence of informed trading. Consequently, the sequential arrival of new information to the market generates both trading volume and price movements, with both increasing during periods characterized by numerous information shocks. Hence, the sequential arrival of information model is consistent with both contemporaneous and lagged relation between volume and volatility.

DISPERSION OF BELIEFS

Harris and Raviv (1993), and Shalen (1993) develop the dispersion of beliefs/expectations as the key factor determining the additional volatility and additional expected volume associated with noisy information (as well as developing other trading behavior relationships in the futures). A greater dispersion of beliefs determines the excess volatility and excess volume of trade, as influenced by the type of trader groups in questions, as modeled by Harris and Raviv (1993), and Shalen (1993). The dispersion of beliefs is caused both by fundamental traders and speculative traders. Informed traders have a relatively homogenous set of beliefs and therefore, trade within a relatively small range of prices. But uninformed traders use more ad hoc method of analysis which leads to wider dispersion of beliefs, resulting in a greater variability of prices.

EMPIRICAL EVIDENCE

The relationship between trading volume and volatility has received substantial attention in the market microstructure literature for a number of years. Grammatikos and Saunders (1986) tested volume effect on five different foreign currency futures over the period 1978 to 1983. They found a strong positive contemporaneous relationship between price variability and volume of trading. Najand and Yung (1991) examined daily data of Treasury-bond futures for the period 1984 to 1989. By applying GARCH and GMM, they detected positive relationship between volume and volatility. Bessembinder and Seguin (1993) examined the relation between volume, volatility and market depth in eight futures market. The sample period cover from May 1982 to March 1990. They find a strong positive relationship between contemporaneous volume (expected and unexpected) and volatility and that the impact of an unexpected volume shock is between 2 and 13 times greater than the effect of changes in expected volume. Moreover, they find that the expected open interest is negatively related to volatility in all markets, a result consistent with the belief that variations in open interest reflect changes in market depth. Kawaller *et al.* (1994) analyze minute-to-minute returns on S&P 500 futures for the last three months of 1998. They found that daily futures volume had a significant positive effect on the volatility of minute-to-minute futures returns. Gannon (1995) studied 15 minutes return on SPI futures for the period 1992. He used GARCH (1, 1) with current futures volume in the conditional variance equation and found a strong positive association between futures volume and volatility. Foster (1995) studied daily data on Brent Crude and WTI crude oil futures for the period 1990 to 1994. By using GARCH and Generalized Methods of Moment (GMM), Foster concluded that there is a strong positive relationship between volume and volatility. Raghunathan and Peker (1997) examined the relation between volume, price volatility and market depth for four contracts traded on the Sydney Futures Exchange covering the period 1992 to 1994. They concluded that positive volume shocks have a greater impact on volatility than negative shock. And also a positive open interest stock is more likely to have an impact on volatility than a negative shock. Fujihara and Mougoue (1997) examined the relationship between volatility and volume by taking daily data of three petroleum futures contracts for the period 1984 to 1993. By using GARCH (1, 1) and linear Granger causality model, they concluded that volume is a significant explanatory variable even though its inclusion in the conditional equation does not significantly reduce ARCH effect. Kocagil and Shachmurove (1998) examined S&P 500 futures for the period 1982 to 1995. They found bidirectional leads and lags relationship between price volatility and volume, but no leads and lags between returns and volume. Gwilym *et al.* (1999) examined five-minute data on FTSE 100, Short Sterling and Long Gilt LIFFE futures for the period January 1992 to June 1995. Evidence from the estimation of GMM supports a significant positive and contemporaneous correlation between volume and volatility. Wang and Yau (2000) studied daily data on S&P 500 futures for the period 1990-94. They found that contemporaneous volume had a strong positive effect on price volatility, while the past volume had a small negative effect. Watanabe (2001) examined the Nikkei 225 stock index futures for the period from August 24, 1990 to December 30, 1997. Following the method developed by Bessembinder and Seguin (1993), Watanabe concluded that there is a significant positive relation between volatility and unexpected volume and a significant negative relation between volatility and expected open interest. Wang (2002) considered weekly data on S&P 500 futures for the 1993-2000 and found strong positive relationship between volume and stress volatility.

From the above empirical discussion, it is apparent that futures trading activity, i.e., volume and open interest are also the important determinant of futures prices volatility. These studies clearly support the theoretical prediction of a positive and contemporaneous relationship between volume and volatility, and negative relationship between volatility and open interest.

MARKET STRUCTURE AND DATA

NATIONAL STOCK EXCHANGE OF INDIA LIMITED (NSE)

The Mumbai-based National Stock Exchange of India Limited (NSE) is the largest stock exchange in India in terms of daily turnover and number of trades, for both equities and derivative trading. NSE was incorporated in 1992 and was given recognition as a stock exchange in April 1993. NSE is the second largest stock exchange in South Asia and the third largest Stock Exchange in the world, after the NYSE and NASDAQ in terms of the number of trades in equities. It is the second largest exchange in Single Stock Futures (SSFs) and the 7th largest futures exchange in the world. Currently, the NSE operates in three different segments—the Wholesale Debt Market (WDM), the Capital Market (CM) and the Futures and Options (F&O) segment. The F&O segment provides trading in derivative instruments including index futures, index options, stock futures, stock options, interest rate futures and other credit derivatives. S&P CNX Nifty is the benchmark of the Indian capital market. Nifty consists of highly liquid, 50 largest market capitalized stocks listed on NSE. The derivatives trading on the NSE commenced with the S&P CNX Nifty futures on June 12, 2000. India introduced SSFs on November 9, 2001. The NSE is a continuous order-driven market having fully automated screen-based trading system, called the National Exchange for Automated Trading (NEAT). To facilitate screen-based trading, there are about 3500 Very Small Aperture Terminal (VSAT) connected all over India. This consists of an Open Electronic Consolidated Anonymous Limit-Order Book (OECLOB), which shows the five best bids and quotes, over all given bids and quotes, in real-time. Only limit orders are shown in the order book. Once the orders are entered, the computer matches them on a price-time priority basis. This means that if there's a match between the highest buy-order and the lowest sell-order, then they are matched as a trade. Next, if two trades have exactly the same magnitude of order, then the order, which was put earlier, gets the priority. The order book prohibits the buyer/seller of a security to know each other's identity. The settlement risks are eliminated by setting up a settlement guarantee fund and reducing the settlement cycle T+2.

DATA SAMPLE

The dataset consists of daily closing price, trading volume, and open interest for the Nifty stock index futures traded on the NSE. The sample period extends from the

Table 1: Summary Statistics for the Daily Returns, Volume and Open Interest

Description	Returns	Trading Volume	Open Interest
Mean	0.0757	11.4026	15.4089
Std Deviation	1.5249	2.1564	1.4888
Kurtosis	14.4467	–3.78211	–3.0156
Skewness	–1.1540	–0.64458	–0.46184
Jerque-Bera	9298.6265	154.1320	127.7693
	(0.0000)	(0.0000)	(0.0000)
ADF Unit Root Test	–16.22323	–3.9942	–7.352458
LB-Q (10)	25.1038	15619.4112	15172.5640
	(0.0000)	(0.0000)	(0.0000)
LB ^{2}-Q (10)	485.9366		
	(0.0000)		

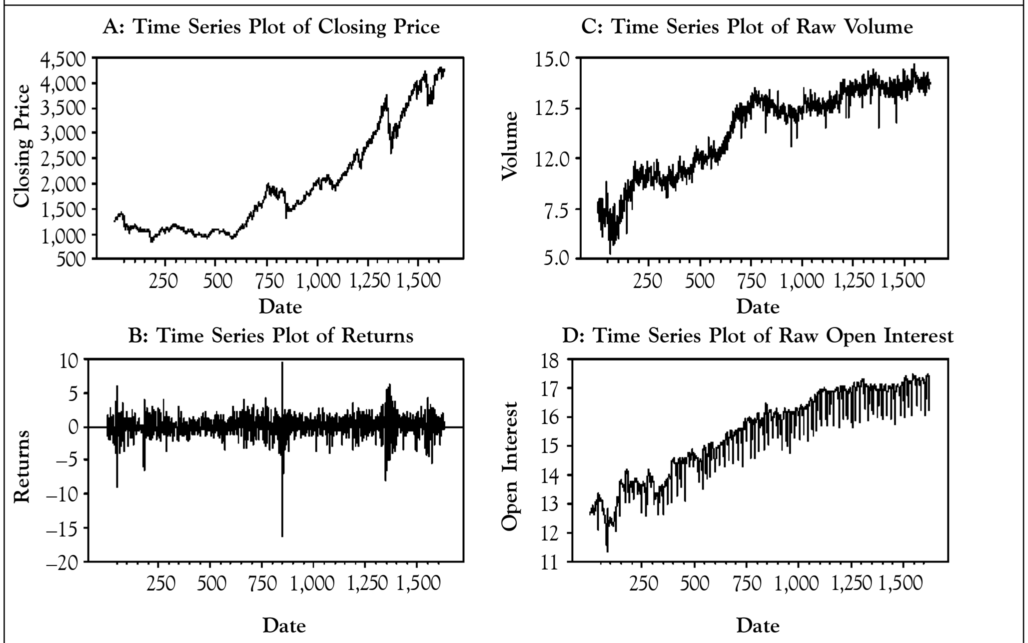
Note:
- LB-Q (k) is the portmanteau statistics Ljung-Box Q test for testing the joint significance of autocorrelation up to order k;
- *P*-value is given in the parenthesis;
- The Mackinnon τ statistics critical values for the Augmented Dickey Fuller Test (Intercept with trend) at lags 4 are –3.969, –3.451 at 1%, 5% significance level respectively.

Table 2: Evidences of Time Varying Conditional Hetroscadasticity

Description	Estimate	*P*-value
ϕ_0	0.0746	0.0400
ϕ_1	–0.9487	0.0000
θ_1	0.9731	0.0000
LB-Q (10)	29.3452	0.0000
LB^2-Q (10)	390.0327	0.0000
LM (5)	394.0327	0.00000
F-statistics	95.4205	0.0000

Note:
- LB-Q (10) and LB^2-Q (10) are the portmanteau Ljung-Box Q test statistics for testing the joint significance of autocorrelation of residuals and squared residuals for lags 1 to 10 respectively.
- LM (5) is the portmanteau test statistics testing the null hypothesis of no ARCH effect in the squared residuals for lags 1 to 5.

Figure 1: Descriptive Plot of Nifty Index Futures from January 2001-June 2007



period January 1, 2001 to June 28, 2007. This study considered only near-month contract data since most trading activities take place in this contract. Daily continuous compound percentage return of Nifty futures is obtained by taking natural logarithmic first difference of the daily closing prices of Nifty futures multiplied by 100, $R_t = 100 * \ln(P_t/P_{t-1})$ where P_t and P_{t-1} are the closing prices at time t and t-1. This study uses both volume (to measure speculative activity) and open interest (to capture hedging activity) as the proxies for demand for stock index futures. These measures are standardized by taking the natural logarithm.

PRELIMINARY DATA ANALYSIS

The descriptive statistics of Nifty index futures returns, volume and open interest series are presented in Tables 1 and 2 and Figure 1.

The mean daily percentage return on the Nifty futures is 0.0757% with a standard deviation of 1.5249%. The returns series is found to be volatile given the high value of standard deviation. The negative sample skewness coefficient, i.e., –1.1540 indicates that the frequency distribution of the return series is negatively skewed or longer tail to the left. The value of kurtosis 14.4467 shows that the unconditional distribution of return exhibits fat tails and excess peakedness at the mean than the corresponding normal distributions. The non-normality can also be conformed by Jarque-Bera test where the null hypothesis is that the given series is normally distributed. Here the *J-B* statistic is highly statistically significant and hence, we reject the null hypothesis. The significant autocorrelation in the squared returns series proves the presence of volatility clustering. We reject the null hypothesis of identical and independent observation and no serial dependence in both return and squared returns series. The ADF test confirms that the Nifty index returns series is stationary. The presence of significant LM (5) test statistic indicates the evidences of ARCH effect and time-varying volatility. Hence, the preliminary data analysis of the Nifty index futures returns conforms that there is time varying volatility, fat tail distribution and volatility clusters. Logarithm of trading volume and open interest series have been taken for the analysis. Both the series are found to be stationary and non-normal.

ECONOMETRIC MODELS AND METHODOLOGY

The empirical analysis of return series exhibits time varying volatility, fat tails, volatility clustering and mean reversion. Data provides the evidence of good fit for using GARCH type model. Following Pagan and Schwert (1990); and Engle *et al.* (1992), the first step in GARCH modeling of daily returns series is to remove any predictability associated with lagged returns by accommodating sufficient number of (AR, MA) terms in the mean equation. In this study, on the basis of AIC and SC information criteria mean equation is specified as ARMA (1, 1) and variance equation is GARCH (1, 1). But Gaussian GARCH models cannot capture all the leptokurtosis in the data. So GARCH with student '*t*' distribution have been used as an alternative to the normal distribution. The study investigates whether the effect of volume on volatility is homogeneous by separating volume into its expected and unexpected components and allowing each component to have a separable effect on observed price volatility. Futures trading activities are partitioned into expected and unexpected (shocks) components by an appropriate ARMA framework. The residuals obtained from the ARMA models are unexpected component. The expected component is computed as the difference between the actual series and the unexpected component.

$$VOL_t = \lambda_0 + \lambda_1 VOL_{t-1} + \lambda_2 \varepsilon_{t-1} + \varepsilon_t$$
$$OI_t = \lambda_0 + \lambda_1 OI_{t-1} + \lambda_2 \varepsilon_{t-1} + \varepsilon_t$$

Open interest is partitioned into expected and unexpected components, again using the same methods. This allows analysis of open interest along two dimensions. First, the expected portion reflects open interest as of the beginning of the trading day. The second dimension, unexpected open interest, captures unanticipated changes in net contract formation. Consequently, expected open interest is approximately equal to yesterday's level, while unexpected open interest is approximately equal to the change in open interest during the day. Open interest measures are pertinent for at least two reasons. First, since many speculators are 'day traders' who do not hold open positions overnight, open interest as of the close of trading likely reflects primarily hedging activity and, thus, proxies for the amount of uninformed trading. Using open interest in conjunction with volume data may provide insights into the price effects of market activity generated by informed versus uninformed traders or hedgers versus speculators. To study the effect of futures trading activity on futures price volatility, the expected and unexpected component of volume and open interest are appended in the conditional variance equation.

$$R_t = \phi_0 + \phi_1 R_{t-1} + \theta_1 \varepsilon_{t-1} + \varepsilon_t$$
$$\varepsilon_t | \Omega_{t-1} \sim \text{Student } t \text{ distribution } (0, \sigma_t^2)$$
$$\sigma_t^2 = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2 + \delta_1 UNEXVOL_t + \delta_2 EXVOL_t + \delta_3 UNEXOI_t + \delta_4 EXOI_t$$

GARCH model cannot capture the asymmetry response of volatility to news. To accommodate for the asymmetry, ARMA (1, 1)-GJR-GARCH (1, 1) model is estimated by including expected and unexpected component of volume and open interest are included in the conditional variance equation.

$$R_t = \phi_0 + \phi_1 R_{t-1} + \theta_1 \varepsilon_{t-1} + \varepsilon_t$$
$$\varepsilon_t | \Omega_{t-1} \sim \text{Student } t \text{ distribution } (0, \sigma_t^2)$$
$$\sigma_t^2 = \alpha_0 + \alpha_1 (\varepsilon_{t-1}^2) + \beta_1 \sigma_{t-1}^2 + \gamma \varepsilon_{t-1}^2 S_{t-1} + \delta_1 UNEXVOL_t + \delta_2 EXVOL_t + \delta_3 UNEXOI_t + \delta_4 EXOI_t$$

EMPIRICAL RESULTS

VOLATILITY ESTIMATION

We estimate the ARMA (1, 1)-GARCH (1, 1) model by using Maximum Likelihood Method which involves joint estimation of both mean and variance equation. It involves non-linear estimation and employ Berndt-Hall-Hall-Hausman (BHHH) numerical algorithm due to Berndt *et al.* (1974) as the optimization technique. The estimated results of ARMA (1, 1)-GARCH (1, 1) model are presented in Table 3.

The sizes of ARCH and GARCH parameters determine the short-run dynamics of the resulting volatility time series. Large GARCH coefficient indicates persistence of volatility and large ARCH coefficient implies that volatility is less persistent and more 'spiky'. The GARCH parameter (β_1) is statistically significant, which indicates that volatility persistence is present in the

Table 3: Maximum Likelihood Estimates of ARMA (1, 1) – GARCH (1, 1)

$$R_t = \phi_0 + \phi_1 R_{t-1} + \theta_1 \varepsilon_{t-1} + \varepsilon_t$$
$$\varepsilon_t \,|\, \Omega_{t-1} \sim \text{Student } t \text{ distribution } (0, \sigma_t^2)$$
$$\sigma_t^2 = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2$$

Estimation is Performed by BHHH Algorithms and Robust Standard Errors Option in RATS 5.0

Parameter	Estimate	P-value
ϕ_0	0.2259	0.0000
ϕ_1	–0.7173	0.0000
θ_1	0.76398	0.0000
α_0	0.06962	0.0000
α_1	0.10638	0.0000
β_1	0.81487	0.0000
LB-Q (10)	11.6192	0.3113
LB^2-Q (10)	11.9123	0.2909
LM (5)	8.2589	0.1425
Sign Bias	0.5495	0.0000
Negative Size Bias	–0.4158	0.0000
Positive Size Bias	–0.4270	0.0000
Joint Bias Test	30.0245	0.0022

Note:
- LB-Q (k) and LB^2-Q (k) are the portmanteau Ljung-Box Q test statistics for testing the joint significance of autocorrelation of standardized residuals (ε_t/σ_t) and squared residuals ($\varepsilon_t^2/\sigma_t^2$) for lags 1 to k respectively.
- LM (5) is the portmanteau test statistics testing the null hypothesis of no ARCH effect in the standardized squared residuals for lags 1 to 5.
- Sign bias, Negative size, Positive size and Joint bias test are asymmetric test statistics given by Engle and Ng (1993).

Nifty futures return. The sum of α and β is 0.91, which indicates that volatility exhibits high degree of persistence. Since sum of α and β is less than one, it indicates that volatility process is co-variance stationary, stable and evidences of mean reverting. A current shock to volatility does not persist indefinitely in conditioning the future variance and shocks decay slowly with time. To assess validity of the estimated model, a battery of diagnostics tests are employed. The insignificant LB-Q statistics and LM statistics imply that the residuals of the estimated model are reasonably well-behaved and adequately capture the persistence in the variance of returns, and the models are well-specified. To test for the presence of an asymmetric response of variance to past shocks, Engle and Ng (1993) asymmetric formal test the sign bias, negative size, positive size and joint tests have been applied. The statistical significant of Engle and Ng (1993) test

Table 4: Maximum Likelihood Estimates of ARMA (1, 1)- GJR GARCH (1, 1)

$$R_t = \phi_0 + \phi_1 R_{t-1} + \theta_1 \varepsilon_{t-1} + \varepsilon_t$$
$$\varepsilon_t \,|\, \Omega_{t-1} \sim \text{Student } t \text{ distribution } (0, \sigma_t^2)$$
$$\sigma_t^2 = \alpha_0 + \alpha_1(\varepsilon_{t-1}^2) + \beta_1 \sigma_{t-1}^2 + \gamma \varepsilon_{t-1}^2 S_{t-1}$$

Estimation is Performed by BHHH Algorithms and Robust Standard Errors Option in RATS 5.0

Parameter	Estimates	*P*-value
ϕ_0	0.0004	0.0000
ϕ_1	0.9993	0.0000
θ_1	–0.9899	0.0000
α_0	0.0987	0.0000
α_1	0.0163	0.0000
β_1	0.9025	0.0000
γ	0.1553	0.0000
Standardized Residual Diagnostics		
LB-Q (10)	14.6119	0.1468
LB^2-Q (10)	5.8808	0.8251
LM (5)	1.6155	0.8993
Sign Bias	0.1259	0.1361
Negative Size Bias	–0.0959	0.18140
Positive Size Bias	–0.1600	0.0727
Joint Bias Test	4.4400	0.1038

Note:
- LB-Q (k) and LB^2-Q (k) are the portmanteau Ljung-Box Q test statistics for testing the joint significance of autocorrelation of standardized residuals (ε_t/σ_t) and squared residuals ($\varepsilon_t^2/\sigma_t^2$) for lags 1 to k respectively.
- LM (5) is the portmanteau test statistics testing the null hypothesis of no ARCH effect in the standardized squared residuals for lags 1 to 5.
- Sign bias, Negative size, Positive size and Joint bias test are asymmetric test statistics given by Engle and Ng (1993).

suggests that an asymmetric modeling of the behavior of volatility seems to be appropriate. GARCH model cannot capture the asymmetry response of volatility to news, to capture potential 'Leverage effect', ARMA (1, 1)-GJR-GARCH (1, 1) model is estimated. The estimation results are presented in Table 4.

The estimation results show that the asymmetric parameter is significant and positive. It indicates that negative shocks have greater impact on volatility then negative shock of equal magnitude, indicating the existence of leverage effect. The sum of ARCH and GARCH parameter is very high, i.e., 0.91, indicating high but stationary persistence.

Since the GARCH parameter is significant, it shows the evidences of volatility persistent process, i.e., past volatility is reflected in the conditional variance. Diagnosis tests of LB-Q, LM test for standardized residuals and squared residuals results shows that ARMA (1, 1)-GJR-GARCH (1, 1) is well-specified and captures the asymmetric responses of shock to volatility.

PRICE VOLATILITY AND UNEXPECTED AND EXPECTED COMPONENTS

This article examines the relation of price volatility to not only trading volume, but also open interest as a proxy for market depth and allows the effects of trading volume and open interest shocks to differ depending on whether shocks are expected or unexpected. The empirical results for when expected and unexpected components of volume and open interest are included in the conditional variance specification are reported in Table 5.

The coefficient estimates for unexpected and expected volume are statistically significant and positive. But the coefficient estimates for unexpected volume is larger then expected volume, demonstrating that surprise (unexpected) in volume convey more information and thus, have a larger effect on return volatility than expected volume. The coefficients for unexpected and expected open interest are negative. The coefficient of expected open interest is statistically significant but unexpected open interest is statistically insignificant. A significant negative coefficient of expected open interest indicates that an increase in open interest mitigates the volatility. These results are consistent with finding by Bessembinder and Seguin (1993), who explain that this is because expected open interest is positively related to the number of traders or amount of capital affiliated with a market and an increase in the numbers of traders or amount of capital affiliated with a market enhances market depth and, hence lessens volatility. Expected open interest is viewed as a proxy for the number of traders or amount of capital dedicated to a market at the beginning of a trading session. Consequently, finding that higher-levels of expected open interest reduce volatility is consistent with the belief that variations in open interest reflect changes in market depth. An important finding is that inclusion of trading volume and open interest in GARCH model has reduced the persistence in volatility. Nevertheless, GARCH effect does not completely vanish. Diagnostics test based on estimated standardized residual and square residuals such as LB-Q (10), LB^2-Q (10), ARCH-LM (5) is found to be insignificant, conforming there is no further ARCH effect and is well captured by the estimated model. But Engle and Ng (1993) size and sign bias test shows that there is an asymmetric response of volatility to the flow of information. To capture asymmetry, ARMA (1, 1)-GJR-GARCH (1, 1) model is augmented by including expected and unexpected components of volume and

Table 5: Parameters Estimate of ARMA (1, 1)-GARCH (1, 1) with Expected and Unexpected Components of Trading Volume and Open Interest

$$R_t = \phi_0 + \phi_1 R_{t-1} + \theta_1 \varepsilon_{t-1} + \varepsilon_t$$

$$\varepsilon_t \,|\, \Omega_{t-1} \sim \text{Student } t \text{ distribution } (0, \sigma_t^2)$$

$$\sigma_t^2 = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2 + \delta_1 \text{UNEXVOL}_t + \delta_2 \text{EXVOL}_t + \delta_3 \text{UNEXOI}_t + \delta_4 \text{EXOI}_t$$

Estimation is Performed by BHHH Algorithms and Robust Standard Errors Option in RATS 5.0

Parameter	Estimates	*P*-value
ϕ_0	0.2121	0.0000
ϕ_1	–0.6549	0.0075
θ_1	0.7045	0.0001
α_0	0.7755	0.0000
α_1	0.1068	0.0070
β_1	0.7713	0.0000
δ_1	0.5313	0.0000
δ_2	0.0458	0.0450
δ_3	–0.0516	0.7659
δ_4	–0.0748	0.0295
Standardized Residual Diagnostics		
LB-Q (10)	11.8711	0.2937
LB^2-Q (10)	23.0590	0.5246
LM (5)	4.3306	0.5028
Sign Bias	0.4402	0.0000
Negative Size Bias	–0.4170	0.0000
Positive Size Bias	–0.3797	0.0000
Joint Bias Test	37.6774	0.0000

Note:
- LB-Q (k) and LB^2-Q (k) are the portmanteau Ljung-Box Q test statistics for testing the joint significance of autocorrelation of standardized residuals (ε_t/σ_t) and squared residuals ($\varepsilon_t^2/\sigma_t^2$) for lags 1 to k respectively.
- LM (5) is the portmanteau test statistics testing the null hypothesis of no ARCH effect in the standardized squared residuals for lags 1 to 5.
- Sign bias, Negative size, Positive size and Joint bias test are asymmetric test statistics given by Engle and Ng (1993).

Table 6: Parameters Estimate of ARMA (1, 1)-GJR-GARCH (1, 1) with Expected and Unexpected Components of Trading Volume and Open Interest

$$R_t = \phi_0 + \phi_1 R_{t-1} + \theta_1 \varepsilon_{t-1} + \varepsilon_t$$

$$\varepsilon_t | \Omega_{t-1} \sim \text{Student } t \text{ distribution } (0, \sigma_t^2)$$

$$\sigma_t^2 = \alpha_0 + \alpha_1(\varepsilon_{t-1}^2) + \beta_1 \sigma_{t-1}^2 + \gamma \varepsilon_{t-1}^2 S_{t-1} + \delta_1 \text{UNEXVOL}_t + \delta_2 \text{EXVOL}_t + \delta_3 \text{UNEXOI}_t + \delta_4 \text{EXOI}_t$$

Estimation is Performed by BHHH Algorithms and Robust Standard Errors Option in RATS 5.0

Parameter	Estimates	*P*-value
ϕ_0	0.0095	0.2991
ϕ_1	0.8586	0.0000
θ_1	–0.8172	0.0000
α_0	0.7558	0.0000
α_1	0.0295	0.0070
β_1	0.6994	0.0000
γ	0.1883	0.0000
δ_1	0.5120	0.0000
δ_2	0.0501	0.0000
δ_3	–0.0325	0.8301
δ_4	–0.1166	0.0039
Standardized Residual Diagnostics		
LB-Q (10)	14.9071	0.1354
LB^2-Q (10)	7.5479	0.6729
LM (5)	2.3174	0.8036
Sign Bias	0.1832	0.1419
Negative Size Bias	–0.0305	0.7296
Positive Size Bias	–0.1477	0.1825
Joint Bias Test	5.3337	0.1489

Note:
- LB-Q (k) and LB^2-Q (k) are the portmanteau Ljung-Box Q test statistics for testing the joint significance of autocorrelation of standardized residuals ($\varepsilon_t \sigma_t$) and squared residuals ($\varepsilon^2_t \sigma^2_t$) for lags 1 to k respectively.
- LM (5) is the portmanteau test statistics testing the null hypothesis of no ARCH effect in the standardized squared residuals for lags 1 to 5.
- Sign bias , Negative size, Positive size and Joint bias test are asymmetric test statistics given by Engle and Ng (1993).

open interest in conditional variance equation. The estimation of this model is presented in Table 6.

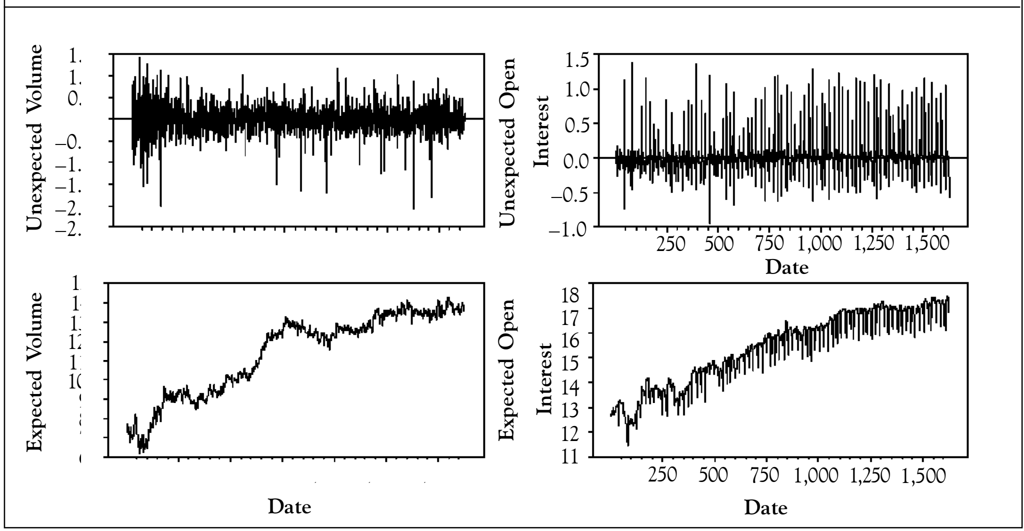
The asymmetric parameter is 0.18, which is negative and highly statistically significant, implying leverage effect in volatility. By comparing GJR-GARCH and augmented GJR-GARCH with volume and open interest, it is found that the degree of persistence measured by the sum of ARCH and GARCH coefficient has reduced from 0.91 to 0.71. The coefficients estimates for unexpected and expected volume are statistically significant and positive. The coefficient of expected open interest is statistically significant but unexpected open interest is statistically insignificant. The insignificant LB-Q (10), LB^2 (10), LM (5), sign and size bias test statistics show that estimated model is a good fit and asymmetry is well captured.

CONCLUSION

This study examines the nature of relationship between futures price volatility, trading volume and open interest for Nifty index futures. The data consists of daily closing price, volume and open interest of Nifty index futures from the period January 1, 2001 to June 28, 2007. The study used both volume and open interest to measure trading activity and to separate hedger from speculators and day traders. Volume gives a measure of speculative activities whereas open interest is a measure of hedging positions. The study investigates whether the effect of volume on volatility is homogeneous by separating volume into its expected and unexpected components by an appropriate ARMA framework and allowing each component to have a separable effect on observed price volatility. The empirical analysis of return series exhibits that there is time varying volatility, fat tails, volatility clustering, mean reversion and leverage effect on Indian stock index futures market. Data provides the evidence of a good fit for using GARCH type model. Gaussian GARCH models cannot capture all the leptokurtosis in the data. So ARMA (1, 1)-GARCH (1, 1) and GJR-GARCH (1, 1) with student 't' distribution have been used to accommodate persistence and asymmetries in volume-volatility relation. To study the effect of futures trading activity on futures price volatility, the expected and unexpected components (Figure 2) of volume and open interest are appended in the conditional variance equation through an appropriate ARMA-GARCH model. The results shows that returns have asymmetric effects on volatility, meaning that negative returns have a greater effect on volatility than positive returns do. Volume (a proxy for speculative activity) is found to have a positive effect on volatility, open interest (a proxy for hedging activity and/or market depth) is able to mitigate volatility. Futures price volatility is positively related to both the expected and unexpected components of volume. However, unexpected volume has a greater impact on volatility than expected volume. Expected open interest is statistically significant and negatively related to volatility, whereas the coefficient of unexpected component of open interest is statistically insignificant. A significant negative coefficient of expected open interest indicates that an increase in open interest mitigates the volatility. These results are consistent with the findings by Bessembinder and Seguin (1993), who explain that this is because expected open interest is positively related to the number of traders or amount of capital affiliated with a market and an increase in the numbers of traders or amount of capital affiliated with a market, enhances market depth and hence lessens volatility. Expected open interest is viewed as a proxy for the number of traders or amount of capital dedicated to a market at the beginning of a trading session. Consequently, finding that higher levels of expected open interest reduce volatility, is consistent with the belief that variations in open interest reflect changes in market depth. An important finding is that inclusion of trading volume and open interest in GARCH model has reduced the persistence in volatility. Nevertheless, GARCH effect does not completely vanish.

Economists believe that futures markets provide a medium for hedging, help in price discovery and improve overall market efficiency. On the other hand, some researchers suggest that futures markets lead to higher speculation and, therefore, cause the markets to destabilize. This study provides insights into how the trading activities of both hedgers and speculators impact volatility and, hence, market stability. It may have important implications for fashioning new contracts. This study also adds to a new dimension concerning market depth in emerging markets like Indian futures market. A good understanding of futures price movements has significant implications for assets pricing models, regulators, hedger,

Figure 2: Time Series Plot of Expected and Unexpected Components



speculators and other participants in futures markets. A positive volume-price volatility relationship implies that a new futures contract will be successful only to the extent that there is enough price uncertainty associated with the underlying asset. Increased volume in futures may lead to increased price variability in futures and so invites demands for their regulation. The question of regulation depends, however, upon the precise effects of positive relationship between volume and volatility. Increased trading volume causing increased volatility, may suggest need for greater regulatory restrictions.

There are a number of drawbacks and potential extensions of this analysis. First, intraday tick-by-tick transactions level data might be employed to determine whether the above results are robust to the measurement interval. The results are based on information on daily average of prices in the last half hour of trade in the market. The conclusive results would require time-stamped intraday data. Though the study provides a broad direction for researchers and policymakers, estimates from data sampled at much higher frequencies would be extremely useful for both policymakers and market participants. A second potentially important factor is the type of traders involved in a transaction. Datasets that allow for the identification of volume by trader type, may shed light on this question.

Acknowledgment: *The author is immensely grateful to the Editor, and an anonymous referee of South Asian Journal of Management for valuable comment, suggestions and remarks on an earlier version of this research paper.*

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Recruitment Advertising and Corporate Image: Interface Between Marketing and Human Resources

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Corporate image is a function of many variables and recruitment advertising may be one of them. The imagery and language contained in recruitment advertisements may provide indicators to the corporate image of the organization. This paper examines the literature on recruitment advertising and analyzes 116 advertisements in a popular Indian newspaper. The paper provides an insight into the interface between marketing and human resources by looking at recruitment advertising and its effect on corporate image.

INTRODUCTION

Today's media savvy world offers an employer a diverse choice of channels through which to attract potential employees, like advertising, referrals, etc. (Barber, 1998). Recruitment advertising seems to be a medium heavily relied upon by most companies to target and establish a direct link with potential employees across a broad section of target audience. Despite this, little systematic research has been carried out to understand the nature of the actual content being used in recruitment advertising (Backhaus, 2004).

Recruitment advertising is an important tool available to companies for effective manpower planning and selection and placement of personnel for suitable positions.

Recruitment advertising—by giving out job description, qualifications required, motivational attributes, hints at job satisfaction, information about the organization, etc.,—has high efficacy towards targeting people with suitable skills and affecting them psychologically to respond to recruitment advertisements.

The size, success and scope of the organization that may be reflected in its recruitment advertisements can enhance its corporate image in the minds of its potential applicants (Backhaus, 2004). A sound corporate image helps the company attract competent employees, positively influences employee morale and improves labor relations (Mishra and Dhar, 2000).

Companies use recruitment advertising as a persuasive marketing communication

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tool (Allen *et al*., 2004), for it could possibly convince the applicants that they are the employer of choice (Neely-Martinez, 2002). Organizational values and images are thus, communicated through publicity and advertising of variables such as salary, job content, opportunities of learning, flexibility and independence on the job, image of the company, company's areas of business, growth and potential for growth of the company and the industries in which it operates, etc. (Herman and Gioia, 2000), using varied communication media such as written advertisements, internet, radio and television advertisements, summer internship programs for graduating students, employee referrals, job fairs, pre-placement talks at the campus, etc.

Yet empirical research in the field of recruitment advertising is virtually non-existent, especially in the Indian context, perhaps due to a lack of academic interest. The literature in this field remains severely limited with only a host of conjectures, speculations and contentions —that are contradictory and inconsistent, available for study (Belt and Paolillo, 1982; and Mason and Belt, 1986).

Research work in this area has remained limited to quantitative analysis of recruitment advertisements using parameters like company name, job description, educational qualifications, experience, salary, etc. (Dewitte, 1989). Lack of research interest and consequently information regarding recruitment advertising leaves little for human resource managers to fall back on, apart from their personal experience and advice (Ryan *et al*., 2000). This paper looks at the interface between corporate image and human resources and serves to bridge the gap by identifying variables used by organizations in India for recruitment advertising.

THEORETICAL FRAMEWORK

Marketing of Jobs: Recruitment advertising has a function similar to that of marketing. In effect, employers here promote their employment products in the job market to target potential employees who are the consumers of these employment products (Price, 1996).

An organization having a strong employment brand will have a strong influence on the decision of potential employees seeking to pursue good job opportunities (Hans and Collins, 2002). Thus, recruitment advertising affects employer brand equity and therefore, can be seen as an effective way of marketing for jobs.

CORPORATE IMAGE AND RECRUITMENT ADVERTISING

Corporate image of an organization is a result of a set of impressions that people experience when they are directly or indirectly confronted with the organization. It is very important to design and structure recruitment advertisements in line with the organization's corporate image as business organizations are expected to be socially aware and responsible (Belt and Paolillo, 1982).

Corporate advertising seeks to create a positive image of the organization and this can be created by exhibiting itself as responsible and a champion of the good (Chew, 1992).

Rynes (1991) found that general sense of corporate image did influence the decision of potential employees to respond positively to the organization's recruitment advertisement. This suggestion was furthered by Gatewood *et al.* (1993) finding that potential applicants use corporate descriptions to develop their own sense of an organization's corporate image. Also, applicants were found to react positively to elaborate descriptions emphasizing positive attributes of an organization (Backhaus, 2004).

Stronger the corporate image of an organization, the larger its pool of applicants (Collins and Hans, 2004). Sullivan (2002) contended that with growing popularity of a brand, it is equally important for its organization to create a distinct and well-defined employer brand identity in order to attract the most suitable and brightest candidates (Backhaus, 2004). Corporate image may also have a significant bearing on the kind of individuals who would apply for the position in response to the advertisement (Ryan *et al.*, 2000).

At the same time, recruitment advertising, a form of corporate communications, may also have significant effect on the corporate image of an organization. Cheney (1983) suggests that the content of recruitment advertisements, providing information about the organization's values, goals, achievements, may help consolidate its identity. In case of recruitment, such an identity may increase the chances of a potential applicant being attracted to the organization (Backhaus, 2004). A carefully worded advertisement can contribute positively to the organization's corporate image (Das and Jain, 1998).

Thus, the content matter of an organization's advertisement is determined by the corporate image it seeks to create.

NEWSPAPER ADVERTISING

Looking at the Indian context, there are five main ways to obtain jobs in the organized sector. The first and the most popular category is the print medium, wherein advertisement space in general and in business interest newspapers and magazines are paid for. Placements and HR category fall into the second category, especially for senior and middle-level placements. The third category includes referrals and personal contacts. The online corporate web page of the company makes up the fourth category, while the fifth and fastest growing category comprises online job search portals like naukri.com, monsterindia.com, jobstreet.com, jobsahead.com, etc. Apart from these, companies also recruit by holding campus interviews and job fairs (Sahay, 2005).

At the same time, despite availability of numerous different channels for recruitment advertising, newspapers continue to be the most dependable and cost effective medium among them all (McIntosh *et al.*, 2000). Newspaper advertising is predominantly used for advertising for supervisory and managerial-level positions (Das and Jain, 1998; and Russo *et al.*, 2000).

Yet very little research or analysis has been carried out to determine the efficacy of recruitment advertising despite empirical studies confirming that traditional newspaper advertising—placing ads in the jobs or classified section—is the most commonly used channel for recruitment advertising.

Newspaper advertisements are particularly beneficial for their being accessible and affordable both for larger firms and public, having a widespread reach and they can carry a bulk of useful information.

Newspapers such as *The Times of India* (most widely circulated English daily in the country) and *Hindustan Times* come out with a weekly employment supplement. For government-related jobs and for those at the lower end, there are publications like *Employment News* and vernacular newspapers. There are also trade magazines like *Dataquest* that carry sector-specific advertisements.

Newspaper advertisements are of several types. First, the blind advertisements—which do not identify the organization placing the advertisement and the applicants are asked to reply to a post-office box number, a consulting firm or recruitment agency. Blind advertisements, while allowing the organization to remain anonymous, make the applicants apprehensive. The more qualified an applicant is, lesser are his chances of replying to a blind advertisement, as the general perception of an organization using blind advertisements remains negative (Das and Jain, 1998). Further, the authors found that well-established organizations of repute and those that had good corporate image hardly ever placed blind advertisements, as identity of the organization is very important for prospective applicants.

On the other hand, open advertisements (contrary to blind advertisements) carried a lot of useful information about the position being advertised for, goals, vision and stature of the organization, etc.

IMPORTANT FEATURES IN NEWSPAPER ADVERTISEMENTS

Through newspaper advertisements, organizations make a direct appeal to potential employees, thereby making them very potent. The content as well as the visual appeal of an advertisement is very important to influence potential applicants to respond to it. The content of an advertisement may comprise of details like job descriptions, qualifications required for the position, details about the organization, mission and vision statements, career growth prospects of employees, selection procedures, etc. Visual details like company logo, the size and color and placing of the advertisement make it more appealing to the reader.

According to Stets and Burke (2000), being associated with or belonging to certain organization, does contribute to identity of individuals. The prospect of enhancing their own social status and identity by being associated with such organizations, may attract the individuals towards well-known and prestigious organizations. Thus, grandiose, elaborate descriptions contained in advertisements may help create a desire in a potential applicant to be associated with the organization.

Corporate Logo

Corporate logos and trademarks are very important in emphasizing the identity of an organization (Mishra and Dhar, 2000). Companies unfailingly make use of logos, trademarks and pictures, which help readers recall the brand identity requiring little processing (Collins and Hans, 2004). These visual tools also help reinforce the company's presence in the job market (Ryan *et al.*, 2000).

Mission and Vision Statements

Mission and Vision Statements underscore the goals and aspirations of organizations and the values they stand for. For instance, statements taken from advertisements that appeared in a popular Indian newspaper like 'Life is our life's work', 'Using cutting-edge technologies to deliver solutions that enable people to connect to life', etc., speak of the company's goals. Similarly, the ones like 'to be an innovation-led transnational pharmaceutical company' speak of the aspirations of the organization.

Mission and Vision Statements carried in a recruitment advertisement create a positive impact on the minds of job seekers by talking about 'the big picture'—stating its goals, aspirations and achievements, apart from serving to recall the identity of the organization (Backhaus, 2004).

Turnover, Manpower and Summary of the Business

Organizations seek to impress potential applicants by stating their size and share in the market, that reflects their potential. Companies find it important to mention their turnover in newspaper advertisements as it not only suggests growth but indicates future growth potential (Backhaus, 2004). Many recruitment advertisements carry a short summary of business of the organization or its history, seeking to evoke respect in order to influence the applicant's concept of self or personality (Ryan *et al.*, 2000).

The manpower size of an organization too is stated to reflect its size and scope, for example: 'to be an innovation-led pharmaceutical company—this vision drives our 3,500 employees across the globe'.

HR Offerings

Human resource offerings in recruitment advertisements speak of what the company has to offer in terms of compensation, perquisites and career growth, making them a set of information most sought after by potential employees.

Advertisement Outline

In the context of advertisements in the print media, it's very important for the advertisement to stand out among many others in order to catch the reader's attention. The use of logos, relevant visuals, headlines, sub-headlines and white space in a well-designed advertisement, when complemented by its size and strategic position on the page, makes it more attractive for the readers (Belt and Paolillo, 1982). Advertisements can be made more meaningful by adding relevant graphic imagery to them, including photographs of an employee (Ryan *et al.*, 2000). Use of color makes an advertisement not only visually more appealing; it may also convey symbolic meaning, thereby increasing its effectiveness (Fernandez and Rosen, 2000).

Corporate Social Performance (CSP)

Turban and Greening (1997, 2000); and Backhaus *et al*. (2002) found that organizations' good corporate social performance made them more attractive for potential employees (Backhaus, 2004). In another study, Backhaus *et al.* (2002) found that firms that rated high on Corporate Social Performance (CSP) were found to be more attractive by potential applicants than those that rated low (Backhaus, 2004). Backhaus (2004) found it ironic that firms were busy managing their corporate image while at the same time overlooking their CSP, which is known to significantly influence their image.

RESEARCH QUESTION

Based on the prevailing literature, what appears is that elements in corporate recruitment advertisement act as inducements to applicants. A carefully designed recruitment advertisement attracts job candidates. The research question that follows from the above review is: Is the content of recruitment advertising by Indian organizations supportive of enhancing its corporate image?

RESEARCH METHODOLOGY

As stated earlier, there is a paucity of theoretical explanations and rationales, a lack of adequate research and very few empirical investigations carried out in the field of recruitment advertising, especially in the Indian context. The purpose of this analysis is to examine recruitment advertisements in a popular Indian newspaper in terms of important variables on which these advertisements had been based. This study presents the results of the importance of certain variables that determined the soundness of recruitment advertisements over two months in a supplement of an Indian English daily—the largest daily circulation English language broadsheet in the world, in the year 2004.

The analysis was based on 116 advertisements including both the manufacturing and service sectors. Only open/non-blind ads have been included in the study.

FINDINGS AND RESULTS

The variables, on which the 116 ads had been based, are included in Table 1 to examine their significance over others. Initially, three tables contained elaborate details and specifications regarding the variables examined. Later, the variables were chosen and compiled into a single table, depicting exact and precise

Table 1: Results of Analysis of Variables in Recruitment Advertisements

S. No.	Variables	Number	Percentage
1.	Industry	0	0
2.	Name	116	100
3.	Turnover	8	7
4.	Manpower	7	6
5.	Summary of the Business	101	87
6.	Mission	11	9
7.	Vision	12	10
8.	Website	0	0
9.	Business Sector	0	0
10.	Recruitment Level	0	0
11.	Corporate Logo	97	84
12.	Corporate Social Responsibility	0	0
13.	Customer Orientation	7	6
14.	Selection Procedure	2	2
15.	Job Description	40	34
16.	Job Specification	110	95
17.	Compensation	7	6
18.	Perks	6	5
19.	Career Growth	9	8
20.	Position of Ad	16	14
21.	Ad Color	92	79
22.	Size	52	45
23.	Other Graphics/Photographs	25	22
24.	Informal Language	6	5
25.	Appeal to Self-Actualization Needs	12	10
26.	Humor	0	0
27.	Thought Provoking Headline or Image	28	24
28.	Employee Name	1	1
29.	Employee Photograph	1	1
30.	Employee Testimonial	1	1
31.	Age	21	18

(Contd...)

Table 1: Results of Analysis of Variables in Recruitment Advertisements

(...contd)

S. No.	Variables	Number	Percentage
32.	Gender	1	1
33.	Essential Qualifications	111	96
34.	Desired Qualifications	48	41
35.	Personality Traits	55	47
36.	Current Salary	25	22
37.	Expected Salary	19	16
38.	Positive Action	0	0
39.	Equal Opportunity Employer	1	1
40.	Photograph	29	25
41.	References	3	3
42.	Work-Family Balance	1	1

information needed for such an analysis. Only 7% of the advertisements contained the turnover of the companies. This means that the companies were not too eager to disclose such details probably to maintain business secrecy, while 6% of the ads stated the manpower of the organizations. For example, "To be an innovation led transnational pharmaceutical company—This vision drives our 3,500 employees across the globe". On the other hand, 87% of the advertisements contained the summary of the business. This shows the significance of this variable for the job seeker, for it states the very nature of the work undertaken by the company and whether or not it is apt for him and includes his area of specialization, e.g., "… is a well-known company for Manufacturing and Export of Precision Ferrous and Non Ferrous Components". Another example says, "… is into the business of exports of yarns and fabrics as agents/exporters with a strong relationship base with the textile mills all over India and customer base through out the world".

Furthermore, 9% of the ads contained the mission of the company, for instance, "Life is our life's work" and "Work with the future of communications. Using cutting-edge technologies to deliver solutions that enable people to connect to life". Only 10% of the advertisements contained the vision of the company. Only 2% of the ads mentioned the selection procedure for the jobs sought. About 34% of the advertisements contained the job description, which included important details like the duties and responsibilities of the person occupying the position. For instance, "Job involves promoting, and creating demand for the company's product by calling on doctors, hospitals, chemists and wholesalers in the assigned territory to generate business".

However, a large number of advertisements (96%) contained the essential qualifications of the job seeker. This was perhaps because it was the most important requisite for a job seeker. An interesting example would be, "To qualify for an interview, you must be a graduate, preferably in Statistics, Computer literate, fluent in English and most importantly, a person who loves tea".

Further, 95% of the advertisements contained the job specification. This was another significant aspect of the job for the job seeker. It would entail the most important and specific expectations from the employee, while he holds that particular position, for instance,

Only 6% of the advertisements contained the compensation that would be received by the prospective employees. The compensation stated in most cases was very flexible and often was determined on the basis of experience and skill. For example, "Salary: Rs. 10,000 to Rs. 20,000 depending upon the experience and skill" or "Flexible compensation package of up to Rs. 7 lakh per annum". About 5% ads contained the perquisites of the prospective employees. The perks generally included the facilities and benefits that the employees in the particular position that was advertised for, would receive.

Besides, 8% of the ads discussed the career growth of the employees that would be employed. This is quite a significant aspect but was probably under-represented in the ads. An example that showed the kind of growth the job seeker could expect in the organization included, "You would be at the cutting edge of all corporate innovations with our training and certifications programs, specially devised to hone your skills".

About 79% of the ads gave importance to the ad color. This was so because the visual image would have a positive effect on the minds of the readers. This variable taken into consideration by the companies that advertised for jobs is quite significant, for all efforts would be focused on making the ad appealing as well as attractive. Next, 14% of ads went for premium positioning and about 45% of the advertisements laid importance on the size. Around 22% of the advertisements contained other graphics and photographs.

Surprisingly, none of the advertisements contained the name of the industry to which the company belonged, the website of the company, the business sector of the company, the recruitment level for which it advertised as well as lacked any mention of corporate social responsibility.

Some interesting variables, which came out of the analysis, have been discussed separately in the ensuing sections:

Informal Language

Only 5% of the advertisements contained informal language. Two interesting examples would be, "Want to make a career in tea Tasting? Then read on" and, "If you are a civil engineer with a vision to turn dreams into reality, we suggest that you join ....".

Appeal to Self-Actualization Needs

Although only 10% of the ads contained an appeal to the self-actualization needs of potential employees, yet the ads portrayed a kind of morale-boosting catchline. For instance, "When it comes to stepping stone to success, you can be sure that … is a big stride". Another interesting ad appealing to the job seeker's self-actualization was, "Walk in if you're a left brain telecom software professional who believes in right brain solutions". Yet another example would be, "Why work for …? The reasons are as many and as varied as our employees: Global opportunities, heavyweight intellectual challenges and an in-depth industry expertise. Ideas that change the way we live and work. A commitment to work/life balance. What will inspire you at …?".

Thought Provoking Headline or Image

Very few advertisements (24%) contained a thought provoking headline or image. The ones that did were those that advertised for jobs at large companies in India. This again was a device employed by companies in the corporate sector to psychologically create an impact on the minds of the potential job seekers. Also, it would provide an insight to the readers about what the company stands for, in other words, the very aim of the companies and the values that it upholds and how significant a contribution can be made by the employees. To cite some examples, "Work at a place where you can design something that really counts. Your future" and "Sometimes all it takes to change the world is one man".

Employee Details

Only 1% of the advertisements contained an employee's name from the company that advertised for jobs. Furthermore, only one percent of the ads contained an employee's photograph and employees' testimonial. For instance, only one of the ads contained details of an employee—"Visiting card of an employee". Also, just one ad contained an employee testimonial—"Take the Sales Challenge for the best in the world tooling technology".

Age

About 18% of the advertisements mentioned the required age of the prospective employees in particular positions. For example, "Full time graduates from the class of 2003"; "He/She should be a graduate (Preferably an MBA) with 2-3 years of experience with a reputed organization and within the age of 25-35 years"; and "Age below 25 years".

Gender

Interestingly, just one advertisement (1%) mentioned the gender of the prospective employee, "General Manager-Quality Control (Male)". Probably the other recruitment advertisements did not contain the gender of the prospective employees because the companies did not have a special preference for either male or female candidates.

Desired Qualifications

About 41% of the advertisements contained the desired qualifications of an employee for the particular positions advertised. The desired qualifications stated the additional qualifications required apart from the essential qualifications. For example, “Diploma in Intellectual Property and Patents as an additional qualification preferred”; “Middle East/Overseas experience is desirable and working with joint venture and asset based multi-disciplinary teams will be an added advantage”; “Excellent communication skills in English, working knowledge of Gujarati will be preferable. Excellent organizational, computer skills, interpersonal skills and ability to supervise, motivate the team would be an asset”.

Personality Traits

About 47% ads talked about the personality traits of the prospective employees. This variable seems important because it states the abilities required of candidates, especially those who are likely to be hired in challenging positions. To cite a few examples, “You should be possessing excellent leadership and team building qualities with superior communication and inter-personal skills”; “If you possess the right attitude, do contact us” and “The post is highly challenging and candidates who have flair for result oriented assignments alone need to apply”.

Current Salary and Expected Salary

About 22% of the advertisements mentioned the current salary of the positions for those seeking the jobs, while 16% of the advertisements asked for the expected salary from the potential job seekers.

Positive Action

Surprisingly, none of the advertisements stated any aspect of positive action or other strategies that reflected social proactiveness.

Equal Opportunity Employer

Only one advertisement (1%) contained such a variable. The company that did advertise for a job and made use of such a variable is a large company. The advertisement read, “…is committed to creating a diverse environment and is proud to be an equal opportunity employer”.

Photograph

About 25% advertisements asked the potential job seekers to send their photographs along with the job applications. For example, “Apply immediately with detailed resume, current salary and color photograph” and “Candidates may apply with details of qualifications, experience, present salary drawn and recent passport size photograph”.

References

Only 3% advertisements asked the potential job seekers to send a few references.

Work-Family Balance

Out of the many advertisements analyzed, only one advertisement (1%) mentioned about the work-family balance. The advertisement read, “Why work for …? The reasons are as many as varied as our employees. Global opportunities. Heavy weight intellectual challenges. In-depth industry expertise. Ideas that change the way we live and work. A commitment to work-life balance. What will inspire you at ?”.

Thus, it can be seen through the various advertisements analyzed, the importance of some variables over others in recruitment advertisements, especially in the Indian context.

CONCLUSION

This paper has produced a list of the variables, on which most recruitment advertisements, in newspapers are based. However, at this juncture, these variables act only as indicators of the marketing orientation of recruitment advertising. The significance of certain variables that should be a must-have in most advertisements, is important to the employer and this study provides an insight into them.

Most potential employees would strive to be associated with and would most willingly like to work with companies of repute. Moreover, important aspects often highlighted in recruitment ads, for instance, work/family balance, are of great significance to employees. However, they have been missed out on by companies advertising in India. There is virtually no attention to ethics, corporate social performance, or diversity messages. Also, most large organizations lay stress on the human factor, and this needs to be studied closely in the context of some of the variables brought out in this study. Open recruitment ads encourage applicants to feel one with the company and undoubtedly, create an impact on the minds of potential employees. The differential impact of open ads vis-à-vis blind ads needs to be empirically tested.

Future research should examine a wider variety of recruitment sources like internet recruitment materials and traditional recruitment brochures. Backhaus (2004) suggest that analysis by industry showed significant differences among the industries in the way they described their firms. For example, electronics industry predominantly focussed on product developments and service innovations. Little was mentioned about employee support, advancement opportunities, culture, climate or work/family balance. Restaurants, retail and service industries were much more employee-focused making promises of interesting and challenging work. Future research should look at industry specific content analysis. It should also look at the impact of the identified variables on perceptions of prospective applicants about corporate image and the attractiveness of these ads. The relationship between marketing, corporate image, and human resources needs to be empirically tested further.

This study suggests improved links between research personnel and employers and the Human Resource Management (HRM) of various companies. Knowledge of recruitment message content, their outcomes function are as important to HR professionals as understanding of product attribute attractiveness is important to marketers. For HRM and academicians covering corporate image processes, the concept of image is broadened. Implications exist for designing messages and communication selections that reflect the corporate image of the organization.

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Global Accreditation Systems in Management Education: A Critical Analysis

*Y Malini Reddy**

The field of management education is undergoing unprecedented changes. It faces a number of strategic challenges such as growth in the number of institutions offering business education; internationalization of the market and the players; new methods of delivery; increased emphasis on managerial competency; and increased pressure for external validation and accreditation. The liberalization of trade in higher education necessitates strong quality assurance arrangements both from the requirement to safeguard stakeholder rights and from the need to promote broader academic value. While the subject of accountability, quality assurance and accreditation in management education have received significant attention, the debate is still unsettled. The paper traces the growth and development of quality assurance and accreditation in management education. It draws attention to several unanswered and unaddressed aspects of quality assurance and accreditation, which are crucial for the primary stakeholders of management education. It reviews some of the globally recognized accreditation systems in management education and proposes a set of guidelines for accrediting agencies to assess their relevance and applicability in a wider global context.

INTRODUCTION

In the context of globalization of economies, technologies, communications and job market there is an increased mobility of knowledge seekers and educated workforce across the national boundaries. Quality assurance, accreditation and licensure are therefore of increasing importance to international efforts in standard setting and academic recognition.

Stella and Gnanam (2003, p. 176)

The liberalization of trade in higher education necessitates strong quality assurance arrangements. With business education increasingly being conducted across national borders, the need for better information about which institutions have achieved a reputation for quality in their own country and which of them meet the highest international standards of quality, is paramount (Rameua, 1997). This necessity is felt due to the requirement to safeguard basic rights of the stakeholders as well as to defend broader academic value (Van Damme, 2002). The increasing 'turbulence' (Stevens, 2000) and highly competitive external environments have led several researchers to call for radical and substantial rethinking of not only the traditional strategic planning processes

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(Bogner and Barr, 2000), but also the incremental and more cautious continuous improvement philosophy that is advocated by the accrediting agencies (Kerby and Weber, 2000). According to Julian and Ofori-Dankwa (2003), this increasing turbulence in the environment of business schools gives the important theoretical rationale for inquiry into accreditation processes. They stress upon the need for higher educational institutions to advance systematic quality assurance efforts, which according to them, requires 'profound rethinking of assumptions and presumptions underlying the accreditation process'. This is applicable to management education as well and since the stakes are high (Friga *et al.*, 2003), it is essential to promote agreement on the major values and characteristics of management education and management practice.

Deliberations about educational quality have been brought into the public arena more fully over the last three decades. While the subject of accountability, quality assurance and accreditation in education have received significant attention, the debate is still unsettled (Forest and Altbach, 2006).

CONCEPT OF ACADEMIC QUALITY

Quality is a multi-dimensional concept and there are different ways to view it. An elusive characteristic that defies precise definition (Fuinlong, 2000), quality is a word with strong positive connotations. Defined as "the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs" in the quality vocabulary of ISO 8042, the other definitions of quality include "fitness for use, as judged by the user" (Juran in Stratton, 1993), "full customer satisfaction" (Feigenbaum, 1956) and "a predictable degree of uniformity and dependability at a low cost, suited to the market" (Deming, 1986). A point to note in these definitions is the shared focus on customer satisfaction.

The existence of these and several other definitions only go to establish the reflection of diverse conceptions of quality arising from varying approaches to quality. The starting point for these varying conceptions is in the difference in purpose and expectations of the multiple stakeholders of higher education (Yorke, 1999; Pereira *et al.*, 2002; and Chua, 2004) and these conceptions can be validated only by understanding the ideological connections with which the concept was formulated (Elliot, 1993). The current conceptions as categorized by the various researchers have been presented in the next few paragraphs to reflect the diverse aspects of and perspectives on quality.

Clark (1983) combines three important stakeholder groups (academic community, the market and the state) with three approaches to quality in higher education (intrinsic quality, extrinsic quality and politically correct quality). These quality aspects suggested by him focus on different functions of higher education namely, to create knowledge and develop the minds of students; to serve the economy; and to further the political agenda (Giertz, 2001). Though intrinsic, extrinsic and politically correct qualities differ in scope, they are not mutually exclusive. While Intrinsic quality forms the core of academic quality with its focus on the knowledge creating processes and student learning, Extrinsic quality is concerned with the demands that society directs towards higher education (Pereira *et al.*, 2002). Politically correct quality is suggested as a new term to describe the role of the State authorities in relation to quality in higher education today (Ball, 1985; Barnett, 1992; and Giertz, 2001). An acceptable evidence of quality in higher education at any given time according to Giertz (2001), will be a trade-off between these three described perspectives. He states, "a clear description of each perspective (what each stands for, what the ideological basis is, and what the implications of the proposed view of quality are) provides a useful starting point for negotiations about a common platform for quality work in a given situation" (p. 6).

David Garvin (1988) in his book, 'Managing Quality', looks at quality in education from the following standpoints:

- A direct result of a professor's expertise (transcendent quality/innate excellence).
- Accreditation, a quality control mechanism, based on Philip Crosby's notion of conformance to requirements (manufacturing based definition).
- A precise measurable variable (a product-based definition).
- Performance of educational service vis-à-vis its price (value-based quality).
- Juran's Fitness for use, grounded in the preferences of the consumer (user-based definition).

Harvey and Green (1993) identified five concepts of quality evident in higher education: Exceptionality (focus on excellence), Perfection (focus on consistency), Fitness for purposes (as determined by the stakeholders, who have an interest), Value for money (focus on accountability in terms of efficiency and productivity of the evaluation process) and, Transformative (focus on empowerment of students and/or the development of new knowledge).

The emphasis of combining all quality criteria is reflected in the definition of quality as given by Bergquist (1995), "Quality exists in a college and university to the extent that adequate and appropriate resources are being directed successfully toward the accomplishment of mission-related institutional outcomes and the programs in the college or university make a significant and positive mission-related difference in the lives of people affiliated with the college university and are created, conducted, and modified in a manner that is consistent with the mission (and values) of the institution" (p. 44). Academic quality as a combination of the following quality criteria, is also emphasized by Fuinlong (2000):

- Input criteria (resources available to the institution: incoming students, financial endowments, faculty qualifications, library and so on);

- Output criteria (alumni, production of intellectual capital, number of graduates);
- Value-added criteria (institutes contribution towards the growth of its members);
- Process-oriented criteria (academic and non-academic activities, conformance to standards, continuous improvement).

Fuinlong's view is further validated by Article 11 of the World Declaration on Higher Education published by the United Nations, according to which Quality in higher education is a multi-dimensional concept, which should embrace all its functions and activities: teaching and academic programs, research and scholarship, staffing, students, buildings, faculties, equipment, services, the community and the academic environment (Pereira *et al.,* 2002).

Although a sizeable amount of work has taken place in the area of educational quality, a consensus with regard to its definition is yet to be reached (Barnett, 1992; Frazer, 1994; Harvey, 1995; and Brennan *et al.*, 1997). In fact, it has been suggested that aiming to find a universal definition of quality would be a waste of time (Green, 1994). While one can question the vagueness with regard to its definition, it is more important to recognize that in order to be able to answer the question of 'What is Quality?', it is crucial to understand what the aspects of quality are and what they stand for (Giertz, 2001). According to Pariseau and McDaniel (1997), "the definition of quality has evolved from 'quality is excellence', to 'quality is value', to 'quality is conformance to specifications', to 'quality is meeting and/or exceeding customers' expectations'"(p. 205). The authors explain this evolution in the light of growing need for assessment of quality in services. They state that while the first two approaches/definitions are difficult to assess, the third is more appropriately used in assessing product quality. They support the last definition as being appropriate for use in service arena. Until now, the most widely accepted criterion of quality in higher education is probably "fitness for purpose" (Ball, 1985).

While the significance of each of the conceptions described above cannot be undermined, it is important to note that an inclination to include more and more can often lessen the usefulness of the concept. Since more than one perspective would be included in the conception of quality, specification of priorities (especially when faced with conflicting interests) between the perspectives is necessary. To be able to pay attention to a particular point of view in a negotiation, it would require to be clearly formulated and convincingly presented. Replacement of 'we know it when we see it' with clear and detailed formulations of what lies within each of the three different perspectives as given by Clark (1983), is a starting point for understanding quality in Higher education.

QUALITY ASSURANCE AND QUALITY IMPROVEMENT

Management of quality in the context of education needs to be handled differently from that in manufacturing or other service industries (Madu and Kuei, 1993). Quality Management (QM) in education, according to Goldberg (2002) exists at three levels:

- Management Processes of an institution (1st level).
- Recognition of students as both a customer and workers in the educational system (2nd level).
- Instructional processes and student learning (3rd and the highest level).

Attempts at improving academic quality as well as assuring stakeholders of the same, have been made by several means which include the accreditation process, development of quality programs with universities, implementation of activities such as Total Quality Management (TQM), Continuous Quality Improvement (CQI) and the ISO 9000 Quality Assurance Model (Fuinlong, 2000). The two approaches that have been highlighted in the literature on debates in QM and Quality Assurance (QA) in education are TQM and Conformance to Specification (CTS). While CTS is a set of clearly defined clauses/characteristics/ elements for developing and implementing a QM system, TQM is much broader in scope wherein in addition to meeting requirements, it deals with 'how criteria are shaped, met and who is to meet them'. TQM has QA and Quality Improvement (QI) as its essential components (Unal, 1999). There is a perceived dichotomy between QA and QM systems (Karapetrovic, 1998) which is asserted by several authors. Crosby (1997) and Deming (1994), for example, believe that QA, unlike QM does not address the improvement of quality. Juran (in Stratton, 1993) in agreement with these authors, goes a step further to claim that 'there is nothing in QA about meeting the customer needs'.

QA is an industrial engineering discipline and has its focus on providing confidence that the requirements for quality are met (Karapetrovic, 1998; and Unal, 1999). It is the sum of all those activities that assure the stakeholders of the quality of products and services at the time of production or delivery and the QA procedures are frequently applied only to those activities and products that are directly associated with the goods/ services to be delivered. It is a prerequisite for accreditation (Pereira *et al.,* 2002, p. 15). Barnett (1994), drawing a distinction between QA and QI states that, QA has a summative function and is 'judgmental, retrospective and formal'. Q I, on the other hand, is described by him as 'non-judgmental, future-oriented and relatively informal' with a formative function. While QA by an educational institution meets and creates expectations in the mind of its stakeholders, QI initiatives require identification of the gap between 'where we are now' and 'where we want to go' (Unal, 1999).

ACCREDITATION IN HIGHER EDUCATION

Accreditation has been defined as "a status granted to an institution or a program within an institution that has been evaluated and found to meet or exceed stated criteria of education quality" (Young *et al.*, 1983, p. 443). It is a tool to achieve high standards and not a goal in itself (Pereira *et al.,* 2002) with the primary reason for seeking it being to assess, maintain, and improve the quality of academic programs (Scherer *et al.*, 2005, p. 662). It is based on evaluation done at a specific point in time, and when viewed as a status symbol, it provides a public certification of acceptable minimum quality.

Accreditation is not a new phenomenon and its roots can be traced back to the 18th century. A concept, which originated in USA, the purposes served by accreditation have reflected the requirements of the society (Thrash, 1979). Pinkham (1955) traces the beginnings of accreditation in United States by pointing out that the various players namely, the federal government, philanthropy, foreign countries, professional organizations and even the institutions felt the need to be able to identify better institutes amongst the existing institutions of higher education in the country. He noted three factors as significant about the birth of accrediting: "(1) It was established voluntarily, not by government order; (2) The same process was begun from two sources simultaneously – by professions from without and by institutions from within higher education; and (3) Accrediting both types of organizations was the outgrowth of genuine and sincere efforts to answer serious problems of the time" (p. 66).

The early type of accrediting (till 1936) addressed the purpose of 'recognition', with accreditation defined as "the recognition accorded to an education institution in the US by means of inclusion in a list of institutions by some agency or organization which sets up standards or requirements that must be complied with in order to secure approval" (Zook and Haggerty, 1936; p. 18). Between 1936-1960 the focus of accreditation moved from 'recognition' to 'approval'. Again, in 1960, there was a change in emphasis towards a 'process' wherein it came to be defined as "the process whereby an organization or agency recognizes a college or university or a program of study as having met certain pre-determined qualifications or standards" (Selden, 1960; p. 5). The purpose served by accreditation in the 1970s was that of securing federal funding and its repercussions are summarized by Orlans (2002) who states, "In 1974, the 'voluntary' was dropped the use of accreditation to determine eligibility for government funds and other public benefits has lent an involuntary and public character to accrediting activities once regarded as entirely 'voluntary' and 'private'".

Al-Bulushi (2003) refers to the work of Young *et al.* (1983) who brought out the new definition of accreditation in the

1980s as comprising of three basic elements—'Concept', 'Process', and 'Status'. "… a concept unique to the US by which institutions of post-secondary education or professional associations form voluntary, non-governmental organizations to encourage and assist institutions in the evaluation and improvement of their educational quality and to publicly acknowledge those institutions, or units within institutions, that meet or exceed commonly agreed to minimum expectations of educational quality.

………. a process by which an institution of post-secondary education formally evaluates its educational activities, in whole or in part, and seeks an independent judgment that it substantially achieves its objectives and is generally equal in quality to comparable institutions or specialized units. The essential elements being (a) a clear statement of educational objectives; (b) a directed self-study focused on those objectives; (c) an on-site evaluation by a selected group of peers; and (d) a decision by an independent commission that the institution or specialized unit is worthy of accreditation.

…..... a status of affiliation given an institution or specialized unit within an institution which has gone through the accrediting process and been judged to meet or exceed general expectations of educational quality" (pp. 13 and 14).

Young's definition continues to be relevant in the current context of education. While the definitions of accreditation have evolved over time, what remained common is the understanding that through the process of accreditation, an agency publicly professes certain designated standards and requirements for an institution or a specific program to be met.

ASSESSING ACCREDITATION SYSTEMS

Over the years accreditation has been severely criticized on several fronts. This section aims an overview of these in the context of education in general and management education in particular. Areas in need of further study have been posed in the form of questions at the end of each subsection:

"The accrediting movement, which started as an effort of the colleges to raise their own standards, has been transformed into cumbersome machinery making a multiplicity of demands and setting up confusing standards of procedure and policies" (Russell, 1943; p. 400).

Several authors have highlighted the procedures of accreditation as cumbersome, time-consuming, expensive, coercive and often with apparent conflict among various stakeholders (Russell, 1943; Pace and Wallace, 1954; Pinkham, 1955; and Pattillo, 1956). Russell (1943) brings forward two basic principles of accreditation which were being forgotten. Firstly, it was often forgotten that accreditation was only one of the ways of improving higher education quality.

Stating that "Accrediting is a legitimate, and I think, a necessary activity, but there are many other ways in which good education can be promoted by groups of institutions"(p.142), Russell pointed towards the coercive character of accrediting that made it appealing to the groups involved in improvement of the institutions. The second principle is related to the need for keeping the procedures of accrediting simple. Russell stated the need for scrutinizing every accreditation procedure to assure that "the good results it produces are worth the time and energy and money required to produce them" (p. 142). Similarly, Pinkham (1955) also highlighted the need for developing such indicators of quality which do not need excessive data gathering and handling.

Faced with different set of expectations from the institutions, the states, the federal government, the students and general public, the accrediting agencies often find it difficult to incorporate the needs of all. Misunderstanding of the nature and processes of accreditation has also been an often-quoted issue (Thrash, 1979). One of the crucial charges leveled against accreditation is that, "The quality assurance movement was in its original conception, intuitively customer- oriented, in looking for brandable replicability" (Peters, 1999; p. 88). Have the systems of quality assurance continued to maintain this conception? If so, then what have its repercussions been on educational institutions as well as on the advancement of academic quality? Are the parameters for assessing an institution's performance tightly structured or open-ended? Are institutions expected to change their operations in response to critical outside requirements placed by the accrediting agencies, or are the institutions given freedom to redefine their purposes and objectives?

> "The severe challenge for extra-institutional quality assurance is how to make itself an activity which demonstrably adds value to institutional activities" (Yorke, 1999; p. 23).

Amongst all the purposes served by accreditation, the one, which is most important to an individual, is that of "validation of the certificates, diplomas, degrees and credits awarded by an institution" (Miller and Boswell, 1979; p. 219). Accreditation, therefore, adds value to the educational credentials that the institution awards. Pattillo (1960) dwells upon some of the unwritten, however, legitimate uses that institutions put accrediting to in order to protect themselves from 'internal and external' pressures. While in the external he points at the political pressures 'improperly' influencing educational programs, in the internal he speaks about the pressure from faculty, students and general public to extend educational programs by offering higher degrees to more numbers in varied fields, 'regardless of need or resources' (p. 304). However, according to Barnett (1994), quality evaluation systems have been moving from being intrinsic to academic life to being extrinsic to it. This view is supported by Seymour (1993) who states that, "Colleges and universities do great 'describing'—what courses are taught, the qualifications of the faculty, and so on. We spend much less, however, analyzing the way we work or attempting to become better at what we do" (p. 78). This phenomenon is described by Hanna (1988) as 'Internal Myopia', a trait wherein organizations focus "too heavily on their internal operations and ignore important signals from their environment" (p. 101). Do the accreditation agencies contribute to this 'Internal Myopia'?

> "The accreditation associations serve two functions, namely, judging and enabling."

This aspect of accreditation has been widely debated. Winn (2002), for example, refers to Daniel Seymour's work while stating the process of accreditation as largely 'summative' rather than 'formative'. Instead of being part of the institutions' process of developing plans to improve quality (formative), the process of accreditation is accused of giving a 'pass or fail' decree (summative). If quality of service arises from service encounters (Peters, 1999), then what are the critical points of 'encounter' in the context of higher education? How are these points being addressed and assessed by agencies for quality assurance and accreditation? Is accreditation a detached and objective judge or is it a body that engages with the structures and processes of a college or university? Do the accreditation agencies pass their judgment based on a 'snapshot' view or do they assess the capabilities of the institution?

> "There is gradually more and more agreement on the viewpoint that globalization in higher education asks for a transnational approach to quality assurance and accreditation" (Damme, 2002b).

According to Damme (1999), accreditation as a quality assurance model is different from other quality assurance models due to the involvement of external partners or stakeholders (government, employers, professional bodies, etc.). These external stakeholders by virtue of their interest in quality education can help develop the accreditation procedures. Stella and Gnanam (2003), in agreement to make the observation in the context of globalization, believe that nationally based higher educational institutions of any country can no longer be considered to be nationally bound. They call upon the domestic process for quality assurance which were not originally intended to serve international purpose, to face the challenge of attending to international stakeholders. They raise three questions related to this issue, which are: "Should national quality assurance systems pay more attention to the demands of international stakeholders? Should the quality assurance systems themselves be internationalized or should they be replaced by completely different mechanisms? Who should take the initiative and to have the responsibility?" (p. 186). Researchers like Damme

(2002a) advocate the development of global quality assurance and the establishment of a global accreditation agency. Is the global homogeneity (thinking global) and market-specific heterogeneity (acting local) applicable to higher education in today's globalized world? Is it then applicable to systems of quality assurance and accreditation? If that were true then, are we moving towards a universal accreditation and assurance system? Do the accreditation systems have a broad enough focus on international norms in order to be able to meet the requirements of the international stakeholder?

> "Accreditation is no longer believed to be a guarantee of programmatic quality" (Thompson, 1993; p. 40).

Accreditation (and quality assurance) of a program and evaluation (and quality assurance) of an institution serve different purposes while complimenting each other. Accreditation as a valued way to ensure quality has however, been questioned for the ability of its "practices, procedures, and policies to meet the public needs to protect consumers and assure that students receive the quality of education they expect" (Wallenfeldt, 1983; p. 151). Given the challenges of managing new modes of delivery such as online distance learning and transnational education provision, are the existing quality assurance systems capable of dealing with these developments? Is there a need for greater focus by them on institutional QM processes? What are the commonalities and differences in the processes, standards and criteria employed by different accreditation systems? Do the accreditation systems believe in 'Eqifinality'? Equifinality refers to the ability of 'different systems to reach the same final state from a variety of initial conditions and by a variety of paths' (Hanna, 1998).

> "The development of quality assurance and evaluation at an institutional level and quality assurance and accreditation on program level is of key importance for maintaining and enhancing quality" (ESIB, 2003).

Continuous Improvement necessitates the ability and practice of continuous questioning. It is only this process of questioning that provokes change. In order to support this process, quality assurance systems themselves need to be dynamic. Accreditation, which was essentially experienced as an intermittent and sporadic activity, till the early nineties, started on a phase wherein, the need for accreditation to exert itself as a 'continuous force within the life of an institution was felt' (Winn, 2002). The perceived value of accreditation by some institutions, which have achieved a higher status of legitimacy than the phenomenon of accreditation itself, remains compromised. One of the factors responsible for this, has been the inability of accreditation agencies to distinguish and communicate the existence of various levels of quality amongst the institutions accredited by them. A common accusation hurled at accreditation is that it fails to recognize the top-quality schools from those who meet its basic requirements. Given the situation where quality assurance systems follow a 'minimum standards' approach, how does a student differentiate between a school, which just about meets the criterion from a center of excellence. Since both categories make equal claims to quality, to a 'customer' the purpose of accreditation provided by an agency is defeated.

Selden (1960) states that "the regional associations have relatively little to offer to the strongest, most effective, leading colleges and universities" (p. 300). He further asserts that accreditation needs to revitalize itself in order to move from being a mechanism for standardization to becoming a constructive force in education. According to Charles E. Peterson, Jr., in the paper Adams *et al.* (1963), the measures used by accrediting agencies over the years have become more standardized. He compares the purpose served by these measures to that by the 'minimum wage laws', which help, establish the minimum standards. Accreditation of an institution, according to Stuit (1960), primarily implied "acceptable performance – not necessarily (indeed rarely) superior performance" (p. 373). Wriston (1960) contends that the accrediting procedures do not foster the pursuit of excellence. Stating the motivation for excellence as internal as compared to the external drive for accreditation, Wriston goes on to note the non-existence of any 'perceptible relationship' between accreditation and excellence. Is it possible for quality systems to have standards that call for perfection instead of a Spartan, minimum standards approach? Can accreditation processes be discriminatory and transparent enough to identify excellence? Can maintaining a 'minimum standard' stand enable accreditation to move from a QA to CQI? Alternatively, should CQI oriented approaches replace the QA oriented accreditation or supplement it?

DIRECTION FOR FUTURE RESEARCH

A review of the literature on growth and development of accreditation shows that there are a lot many questions that need to be addressed. Research is particularly needed in the areas of:

- Notions of quality as encompassed in the different global accreditation systems.
- Triggers for bringing about change or a revision cycle in an institute.
- Accreditation processes, standards and criteria itemized as relevant in the current internal and external environmental context of a profession.
- Comprehensive international quality assurance system that would substitute national policies and procedures.
- Future model in which existing national quality assurance and accreditation systems are supplemented by additional accreditation procedures, to enable internationalization.
- The impact of accreditation processes on QI in an institution.

While these areas for further research are relevant for all educational institutions, the need for developmental work, which would help clarify relevant dimensions of institutional effectiveness in management education, is the focus of this paper.

ACCREDITATION IN MANAGEMENT EDUCATION

"Accreditation reinforces the 'professionalization' of management institutions/ business schools and is more and more a determinant of student and recruiter choice" (Spender, 2005; p. 1286).

Increasing demands and expectations from internal and external stakeholders today challenges management institutions. Accreditation systems claim to help institutions in meeting these challenges by enabling them to refocus their efforts on process improvement and by providing a framework for continuous quality improvement. Though the systems and procedures established for quality assurance in Business studies vary in structure, intensity, and thoroughness, the accreditation processes in business education have several defining characteristics such as a formalized assessment process (Weidman, 1992), documentation for external accountability involving extensive record keeping of the processes business schools use (Uzumeri, 1997), hard data-driven (AACSB, 1994: 9) and continuous improvement, wherein the accreditation standards seek to infuse significant improvements over time through continuous, rather than episodic, processes (Kerby and Weber, 2000). The characteristic of continuous improvement is questioned by Julian and Ofori-Dankwa (2003) who state this approach to be less appropriate in the current 'discontinuous change environment'. Research promoting scholarly examination of accreditation and quality assurance in management education would advance the understanding of fundamental issues in accountability, quality assurance and accreditation. It would inform academicians, practitioners, institutions and governments. Currently, there are hardly any studies which compare and contrast the globally known accreditation systems' approaches to academic quality standards with various national approaches. Further, the limited literature that is available is largely concentrated on accreditation systems within USA.

This study took up a preliminary examination of the national accreditation systems in management education across the 18 countries.[1] At this point it is important to note that a large number of countries (including Turkey, Venezuela, Ukraine, Pakistan, Kazakhstan, Korea and many more), do not have specific accreditation systems for management education. Authorization from Higher Education Council/Ministry for starting programs is considered as accreditation in these countries. Accreditation is therefore, not an integral part of higher education in many countries especially those outside USA and Europe.

1 These countries were Australia, France, China, India, USA, South Africa, Ukraine, UK, Germany, New Zealand, Austria, Switzerland, Venezuela, Kazakhstan, Korea, Turkey, South Africa, Japan.

The accreditation systems reviewed in this study were from bodies such as European Foundation for Management Development (EFMD), UK; American Assembly of Collegiate Schools of Business (AACSB), USA; Association of MBAs (AMBA), UK; Association of Business Schools (ABS), UK; Foundation for International Business Administration Accreditation (FIBAA), Germany, Austria and Switzerland; The Association of Management Development Institutions in South Asia (AMDISA), SAARC countries; National MBA Education Supervisory Committee, China; All India Council for Technical Education (AICTE) and University Grants Commission (UGC), India.

ANALYSIS

Barring the accrediting agencies in the US and the UK, quality of business programs is being assessed in the traditional manner by using input, process and output measures. Input measures review resources such as students, faculty, infrastructure and financial stability as these are considered essential for conduct of academic activities. Process measures assess the delivery and use of institutional services in terms of class sizes, student to faculty ratios, teaching methods, etc. Along with these, output measures such as salary levels of graduates, placement and graduation rates, intellectual contributions by faculty and the like, reflect what an institution has achieved as a result of inputs applied. Currently, outcomes measures are also being considered. These scrutinize a program from the perspective of the measurable advances the program makes in developing competencies in students. In other words, outcomes measures reveal 'what individual students learn'.

Management institutions within and between countries vary greatly with regard to inputs, processes, outputs and lately, outcomes. These variations give rise to uniqueness of education systems in different countries and reflect differences in emphasis on some parameters as a reflection of quality. While the accreditation systems followed in different countries, largely concur on the criteria for assessment, there are stark differences in their focus, directly reflecting the unique needs of the country and/ or region. There are three distinct areas of emphasis that emerged out of the review: (1) Focus on diversity in stakeholders and industry linkages (e.g., European systems); (2) Focus on faculty quality, intellectual contributions, outcomes measure (e.g., American systems); and (3) Input focus and process focus (e.g., Australian and Indian systems).

Apart from EFMD and AACSB, which have a global presence, none of the other systems have made such a mark. It is important to note here that having a global presence is not synonymous with having a global accreditation system. A truly global accreditation system needs to be flexible enough to consider several crucial contextual issues. To begin with, the basic characteristic of accreditation, 'volunteerism' may not be getting fulfilled in many nations. Accreditation process is being conducted by government with the purpose of using it as a basic approval process for running a program or institution and for being eligible for government funds. The authority that rests with Ministries and Councils of Educations in different countries, places several financial and structural constraints on institutions, consequently affecting their institutional development activities. These aspects have not been sufficiently dealt with in the present globally recognized accreditation systems, which ask the institutions to have autonomy in running their institutions.

While a description of national culture and institutional culture are emphasized, the impact of the former on the latter is not given sufficient attention. For example, the culture of writing and publishing, coupled with the available avenues for publishing research work, are some factors that are needed to be considered while judging the sufficiency, acceptability of quality of intellectual contributions by an institute. This is however, rarely incorporated. Again, context determines the manner in which 'adequacy' of human resources (especially faculty resources) are perceived. Benchmarking of faculty to student ratios; number of publications by faculty; number of courses to be taught in a semester therefore, are tricky aspects left unexplained.

Diversity in terms of presence of faculty and students of international origin is a rather difficult task, especially in developing and underdeveloped countries. Operating at different levels of capacity building, these nations cannot match faculty salaries and student facilities as in developed nations. Stringency of admission and retention policies is another aspect, the requirement for which varies, dependent upon the availability of prospective student population. Countries like Australia, for example, faced with a student shortage crisis, place a lot of importance on student retention policies adopted by an institute. The same may not be true with countries like India and China which enjoy large student enrollments into business programs.

In spite of these issues that make a global accreditation impracticable, an area of widespread debate is the development of an accreditation system that would be universally applicable. There are researchers like Damme (2002), who advocate the development of global quality assurance and the establishment of a global accreditation agency and there are numerous others who oppose this view. While conceptually there is merit in the idea of an 'ideal' accreditation system, operationalization of the same is ridden with problems.

DISCUSSION AND RECOMMENDATIONS

Global homogeneity (thinking global) and market-specific heterogeneity (acting local) seem to be applicable to higher education as well. This is clearly demonstrated in the current focus amongst nations to work on bilateral and multilateral agreements for recognition of qualification instead of working on developing a common accreditation system. Collaborations within regions for finding ways of enhancing student mobility through credit transfers, is also an important trend. Some examples that demonstrate this are: AMDISA, an association that works towards enhancing quality by networking across seven nations in the South Asia region; The Bologna Process that aims to make European Higher Education competitive and comparable to the best performing systems in the world by setting in a series of reforms for achieving common course structures, QA and recognition of qualifications and periods of study; the accreditation bodies in Kenya, Uganda and Tanzania working towards developing agreed criteria for QA with a view to achieve cross-border recognition of each East and South African nations' qualifications and so on.

Given that each country has its own unique issues and thereby areas of emphasis to define quality, developing a framework that would be universally applicable accreditation criteria would be an impracticable task. However, development of a set of guidelines for different accreditation systems to compare and evaluate their practices to achieve wider applicability is both desirable and needed. Based on an understanding of the evolution of accreditation; study of the limited empirical research findings in the field of accreditation in higher education in general and management education in particular; and review of accreditation systems in management education from nearly 20 countries, this study proposes that the following questions be used by accrediting agencies to gauge their relevance:

I. How does the accreditation system demonstrate that:

- It has a broad enough focus on international norms.
- It is able to meet the requirements of the international stakeholders: employers and students.
- Its emphasis is not on meeting the minimum threshold but on achievement of excellence.
- Its flexibility in accommodating the concerns faced in different contexts.
- The parameters for assessing an institution's performance are not tightly structured but are open-ended.
- Its emphasis is on institutions to move beyond describing 'what they have achieved' to analyzing the manner in which 'improvement is being approached'.
- It follows a formative process of being a part of the institutions' development plans to improve quality rather than be a summative process of giving a pass or fail decree.

II. How does the accreditation system

- Justify the relevance of its emphasis on input, process, output and/or outcomes measures in different contexts.

- Achieve comprehensiveness with an eye on having manageable demands on the institutions' time, effort and financial cost.
- Demonstrate its ability to incorporate different notions of quality: reputation, resources, content, output and outcomes.
- Provides an opportunity to institutions to focus more heavily on notions of quality that may be considered relevant in their current context.
- Engages with the structures and processes of an institute so that in addition to taking a snapshot view, it assesses the capabilities of the institution as well.

This study concludes that voluntary participation; clear statement of standards against which compliance is assessed; use of external, independent and unbiased assessors; and use of valid measures for assessing the degree of compliance, are all characteristics of an ideal accreditation system. However, the characteristics of a globally relevant system go beyond these. Inbuilt flexibility to cater to the peculiar contextual issues faced by different nations is a mandatory requirement. The guidelines developed in this study add to the literature on 'assessing the assessors' and could act as a useful self-assessment tool for accrediting agencies.

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An In-depth Profile of the Customers of Single Brand Store in Emerging Market

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This paper examines the profile of customers of a single brand sport store and classifies them into groups, which will assist retailers in identifying their revenue-generating customers. A survey of 400 customers from four single brand sport outlets in the city of Bangalore, located in the south of India, was conducted. For this study, the customers who were revisiting the store within one year were classified as patrons and the rest as non-patrons. The patrons and non-patrons were further segregated into three groups—based on their purpose of visit to the store—the purposive patron, purposive non-patrons and browsers. These three groups are examined for differences in their demographic and psychographic characteristics, media habits and ownership of personal lifestyle products/services. ANOVA results showed that the purposive patrons were significantly different on 18 variables pertaining to appearance consciousness, health and fitness, shopping styles and general outlook. The media habits, time spent on exercising and actual possession of durables of the three groups were compared. The purposive patrons wanted to remain slim only for the sake of appearance and looks, while the browsers were both health and fitness conscious.

INTRODUCTION

The face of Indian retailing has witnessed a rapid transformation over the last decade. This has resulted in the Indian consumer being exposed to a variety of retail formats leading to a change in consumer buying behavior. The customer is facing a problem of plenty in terms of numbers and a variety of retail formats making him dissatisfied with a blanket value proposition offered by them. In order to cater to the increasing complexity in the marketplace, the Indian retailer needs to know his customer and design a unique value proposition for his segment. If the retailer has to customize his offer to make it more relevant to his target segment, it is imperative for him to understand his customer profile.

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Indian retailer is plagued with the problem of very poor conversion from high footfalls into sales. As we go from food retailing to discount stores to lifestyle retail stores the conversion rate rapidly falls from 80% to 25% (Weekly-Retail-News, 2006). In case of single brand speciality stores this is aggravated and such outlets are besieged with window shoppers, making it critical to profile customers visiting the shop. In order to make efficient and effective decisions regarding the store and resources, the retailer should be able to distinguish his revenue generating customer segment from the non-revenue generating segment. This study is an attempt to profile customers of a single brand store format.

THEORETICAL FRAMEWORK AND HYPOTHESIS

'Market segmentation' involves viewing a heterogeneous market as a smaller homogeneous market in response to different preferences attributable to the desires of the consumers for more precise satisfaction for their varying wants (Smith, 1956). Historically, there have been two approaches to market segmentation–"people-oriented" and "product-oriented" (Plummer, 1974). A framework for considering the various bases and methods available for conducting segmentation studies has been discussed by Michel and Kamakura (2000). Tolley (1975) proposes a system using generalization to identify, define and explain different kinds of users. Socioeconomic and demographic variables have been successfully used to segment the market by Cunningham I C M and Cunningham W H (1973).

Identification of customers and their buying behavior patterns have been the focus of a number of retail store studies. The results of these studies have been useful to the marketing managers in providing solutions to various marketing problems (Applebaum, 1951). Kinley *et al.* (2000) examined the relationship among several segmentation variables, personal and promotional cues used in information gathering step of the purchase decision process to segment the customers.

Psychographic methods have been used to obtain a better understanding of consumer behavior in at least three ways, namely—grouping of consumers, changing consumer behavior and providing new consumer typology. Crask and Reynolds (1978) carried out an in-depth profile of the department store shopper to identify the frequent shopper and compared him to a non-shopper using data about consumers' activity, interest, opinion as well as demographic characteristics. The results of another study which focused on supermarkets and select store attributes indicated that lifestyle and shopping orientations differ among patronage attribute preference groups and this segmentation can be used for planning retail strategy (Darden and Ashton, 1974-75). The results of a study, undertaken by Reynolds *et al.* (1974-75) which probed the viability of psychographic measures, suggested that lifestyle characteristics are useful basis for describing store loyal consumers.

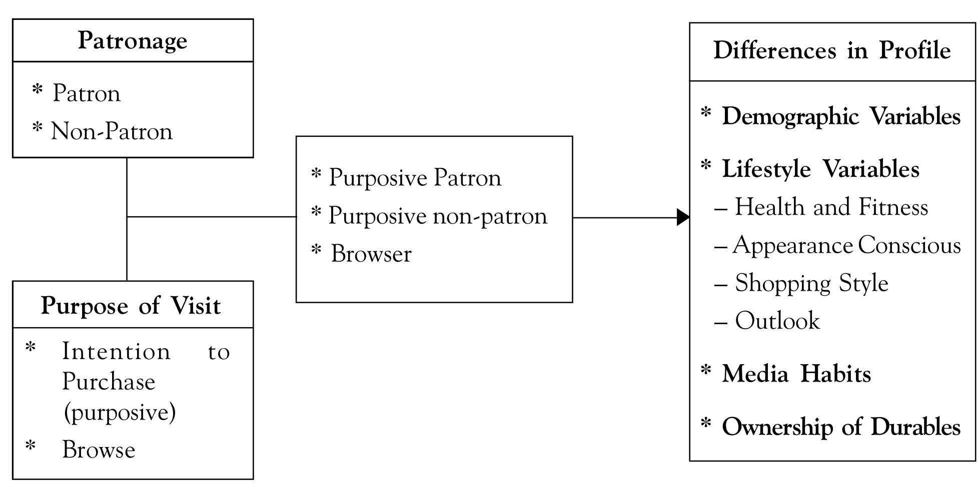
A segmentation index applicable to all types of retail stores for classifying loyal and non-loyal consumers was developed by Samli (1975). Lifestyle characteristics have been used to identify shopper's communication needs, which would be useful in designing suitable promotional strategies (Moschis, 1976). Demographic, psychographic and media consumption differences between patrons and non-patrons and between four retailing institutions have been examined by Bearden *et al.* (1978).

In the case of India, little work has been done towards segmenting the Indian consumer in the context of organized retailing which is available in the public domain. One such study classifies the Indian shoppers into six segments based on the observation of their shopping behavior (Sinha and Uniyal, 2005). Buyer characteristics across different store types are used to explain store choice behavior by Sinha *et al.* (2002).

A study of the existing literature suggests that little attention has been given to the arena of understanding and classifying the exclusive brand store customer. With the mall boom in India, it is imperative for the retailer to identify his target segment and customize his offer to survive the fierce competition and remain profitable. This study is specifically a comprehensive analysis of the customer characteristics of a single brand sport store format.

Unlike most retail studies in the past, which have looked at a single customer-grouping variable like patronage, this study considers two variables, patronage and the purpose of the visit the store to determine groups for profiling.

Figure 1: Research Framework



Based on the review of the relevant literature, Figure 1 shows the basic framework of this study. This framework suggests that there is a difference in profile, which can be attributed to differences in patronage and the purpose of visit.

The objective of this study is (a) to profile the customers of a single brand sport store, (b) to find out differences in profile, if any, between the purposive patrons, purposive non-patron and the browsers and (c) to draw meaningful implications for the retailer. The following hypotheses have been developed based on review of literature presented earlier.

H_{1a}: *Gender of the customers will be different across the three groups of customers visiting the store.*

H_{1b}: *Age of the customers will be different across the three groups of customers visiting the store.*

H_{1c}: *Income of the customers will be different across the three groups of customers visiting the store.*

H_{1d}: *Occupation of the customers will be different across the three groups of customers visiting the store.*

H_{2a}: *Lifestyle in terms of health and fitness will be different across the three groups of customers visiting the store.*

H_{2b}: *Appearance conscious will be different across the three groups of customers visiting the store.*

H_{2c}: *Shopping style will be different across the three groups of customers visiting the store.*

H_{2d}: *Outlook towards life will be different across the three groups of customers visiting the store.*

H_{3a}: *Television viewing habit will be different across the three groups of customers visiting the store.*

H_{3b}: *Radio listening habit will be different across the three groups of customers visiting the store.*

H_{3c}: *Magazine reading habit will be different across the three groups of customers visiting the store.*

H_{3d}: *Newspaper reading habit will be different across the three groups of customers visiting the store; and*

H_4: *Ownership of lifestyle products will be different across the three groups of customers visiting the store.*

METHODOLOGY

PHASE I

Lifestyle variables provide additional meaning to standard demographic classification as they provide more descriptive information about the consumer (Wells and Tigert, 1971). Thus, the first phase of the study is involved in identifying dimensions, which would be useful for understanding activities, interests and opinions of the customers of a single brand sport store. Four dimensions reflecting general characteristics of the single brand store customers were derived from in-depth discussions with the retailer, examination of statements used in prior researches, intuition, conversation with friends and internal brainstorming (Wells and Tigert, 1971; and Ziff, 1971).

The dimensions identified were: appearance consciousness, health and fitness, shopping styles and general outlook. In order to confirm that the statements were representative of the dimension, three independent judges were asked to classify the statements into groups. The result indicated that the statements were representative of the dimension. These statements were further tested for ambiguity and flow amongst 30 research associates of a management institute. Subsequently, these statements were tested for reliability using responses from 160 respondents outside a mall. Out of 160 responses received, 144 valid responses were tested for reliability using Cronbach's Alpha(Cortina,1993; and Bearden and Netemeyer, 1999). The resulting Cronbach's Alpha coefficient indicated sufficient reliability (Table 1). Life style information was captured using 34 statements on a sevenpoint agree/disagree scale about activities, interests and opinions.

PHASE II

The second phase involved a consumer survey of customers of single brand sport store using a structured questionnaire. The questionnaire contained questions relating to customers' demographic characteristics and statements derived from phase I relating to lifestyle variables. Further, information about patronage and the reason for this specific visit to the store was sought. Information sources used and trusted while choosing this type of outlet, time spent and frequency of physical activities were collected. Media consumption habits in terms of frequency of daily television viewing and radio listening and information pertaining to time spent on reading three daily newspapers and three weekly magazines were obtained. Details about possession of brands of personal lifestyle products like mobile phones, vehicles and wristwatches were also sought. Information about ownership of timeshare holidays and credit cards was obtained.

Table 1: Cronbach's Coefficient Alpha for Psychographic Dimensions

Dimension	Sample Statement	Number of Items	Coefficient Alpha
Appearance Conscious	I have one or more outfits of the latest style.	9	0.816
Shopping Styles	I look for the lowest possible prices whenever I go shopping.	9	0.794
Health and Fitness Conscious	I make sure I exercise regularly.	8	0.828
Outlook	I think women make as good managers as men do.	8	0.781

The questionnaire was pre-tested using responses from 150 customers of the particular single brand sport store, which was under study. The instrument was tested for appropriate words, sequence of sentences and ease of response format. It was observed that the length of the questionnaire caused fatigue and disinterest leading to incomplete responses resulting in only 80 valid responses. Therefore, questions relating to possession of various household durables had to be deleted.

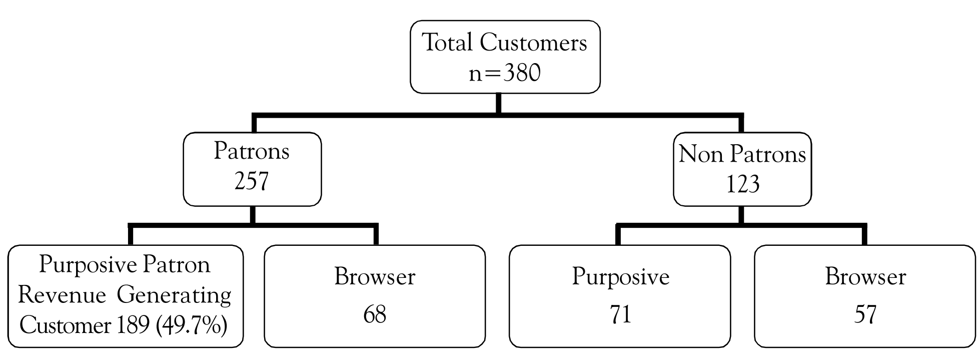
Subsequently, data was collected from 400 customers from four single brand sport outlets in the city of Bangalore, located in the south of India. Bangalore was among the first cities in India where a variety of retail formats were introduced and consequently had a comparatively mature customer base compared to other cities. This was important to ensure that our study findings were not 'short-term' retail evolution stage specific (Woodruffe, Eccles and Elliott, 2002). The availability of the data and the cooperation of the store owners were an important reasons for the selection of the city and store format. Every fifth customer was intercepted in the store, before they exited the store.

It was ensured that no sales promotion offer was available at the time of data collection. The sample consisted of customers who had visited the store and shopped as well as those who had visited the store but did not shop. Finally, 380 valid responses were obtained and analyzed.

ANALYSIS AND FINDING

The main purpose of the study was to profile and highlight differences between the purposive patrons, purposive non-patrons and the browsers. The customers were categorized into groups through self reported behavior about patronage and the reason for their visit to the store (Figure 2). The first classification was based on the basic retail segmentation dimension of patron versus non-patron. The patronage was determined by finding out information pertaining to (i) whether this visit to the

Figure 2: Classification of Customers



store was their first visit or not? and (ii) if not, the time gap between the visits. Those who reported revisiting the store within a year were considered as patrons and the remaining as non-patrons.

Further, the respondents were asked to indicate the reason for coming to the store on a particular day. That group of customers who indicated that the purpose of their visit to the store were specifically to purchase was classified as purposive. This information along with the patronage data was used to segregate customers who were revisiting the store within a year for the purpose of buying. This group of customers was termed as purposive patron. The second group was purposive non-patron and the third group consisted of browsers which included both the patrons and non-patrons who had come to window shop or browse. Patrons constituted 67.6% of the total customers to the store with purposive patrons constituting 49.7%.

DEMOGRAPHICS

The customers in the three groups were not found to be very different on any of the demographic variables such as age, gender, occupation, income and educational background. Males constituted 73.9% of the total customers and 73.1% of the purposive patrons visiting the store. A majority of the total customers (64.7%, 17.6%) and the purposive patrons (70.2%, 17.6%) of the store were young adults in the age group of 21-30 years and 16 to 20 years. The purposive patrons (50.2%) and rest of the customers,(46.9%) were either graduates or postgraduate professional degree holders employed in private sector as senior executives or self-employed with annual income of more than Rs. 4.5 lakhs or students belonging to similar households.

Demographic variables were not helpful in generating differences in profile of three customer groups. As one-way ANOVA results indicated that the groups did not differ significantly on age (sig. = 0.067), gender (sig. = 0.130), income (sig. = 0.706) and occupation (sig. = 0.071) at a confidence level of 95%.

The above findings indicate that this kind of store is perceived as young, masculine and expensive which explains under representation of customers belonging to older age groups, women and those not belonging to SEC A1.[1]

LIFESTYLE

This information was captured through four dimensions using 34 statements on a sevenpoint agree/disagree scale. To determine group differences on variables relating to health, fitness, shopping style, appearance, fashion, brand consciousness, outlook towards life, gender bias and financial risk, ANOVA tests were conducted. The results revealed that the three groups differed significantly on 19 variables. Table 2 gives

1 Indian marketers use Socio Economic Classification (SEC) which uses a combination of education and occupation of the chief wage earner to classify the buyers in the urban areas (Kotler, *et al.* (2006), *Marketing Management 12e, A South Asian Perspective)*.

Table 2: Sample of AIO Variables/Purposive Patrons/Purposive Non-Patrons/Browsers

One-Way ANOVA

		Sum of Squares	*df*	Mean Square	*F*	Sig.
FC2	Between Groups	58.396	2	29.198	8.049	0.000
	Within Groups	1,353.082	373	3.628		
	Total	**1,411.479**	**375**			
FC7	Between Groups	49.411	2	24.705	5.927	0.003
	Within Groups	1,533.910	368	4.168		
	Total	**1,583.321**	**370**			
FC8	Between Groups	43.034	2	21.517	5.559	0.004
	Within Groups	1,424.276	368	3.870		
	Total	**1,467.310**	**370**			
SS1	Between Groups	63.025	2	31.512	8.403	0.000
	Within Groups	1,398.879	373	3.750		
	Total	**1,461.904**	**375**			
SS2	Between Groups	49.336	2	24.668	7.462	0.001
	Within Groups	1,233.065	373	3.306		
	Total	**1,282.402**	**375**			
SS4	Between Groups	33.781	2	16.891	4.601	0.011
	Within Groups	1,369.450	373	3.671		
	Total	**1,403.231**	**375**			
HF1	Between Groups	30.603	2	15.301	4.320	0.014
	Within Groups	1,321.182	373	3.542		
	Total	**1,351.785**	**375**			
HF4	Between Groups	30.543	2	15.271	3.688	0.026
	Within Groups	1,544.436	373	4.141		
	Total	**1,574.979**	**375**			
HF5	Between Groups	23.582	2	11.791	3.191	0.042
	Within Groups	1,374.727	372	3.696		
	Total	**1,398.309**	**374**			
O7	Between Groups	77.284	2	38.642	8.623	0.000
	Within Groups	1,644.619	367	4.481		
	Total	**1,721.903**	**369**			

Note: Confidence Level: 95% $\alpha = 0.05$

FC2: Importance of looking well-dressed
FC7: Owning at least one or more latest outfits
FC8: Fashionable clothes and peer approval
SS1: Shopping for new and novel products
SS2: Pay premium for quality goods
SS4: Preference for promotions like contests
HF1: Eating healthy and nutritious food
HF4: Exercising regularly
HF5: Wanting slimness without effort
O7: Belief in astrology

sample of statements on which significant differences were found across groups.

Additional information on actual time spent and frequency of physical activities was collected. ANOVA results confirmed that the time spent on exercising by the three groups was significantly different. Thus, hypotheses *H1a*, *b*, *c* and *d* are rejected.

Details of possession of brands of three lifestyle products was obtained and classified into three categories: (i) functional, (ii) fashionable, and (iii) status. The percentage of ownership of these lifestyle products within each classification was compared across groups.

Information about ownership of timeshare holidays and usage of credit cards was analyzed and compared across groups.

ANOVA was performed in order to assess whether media consumption habits differed across customer groups for radio listening, television viewing and reading newspaper/magazine. The type of magazines read by customers were classified into (i) news and information, (ii) film, (iii) sports, (iv) womens magazine and (v) specialty (e.g., Chip, Autocar). Their preferences across the groups were compared. Similarly, newspaper read were classified into (i) National English eaily (ii) vernacular (iii) financial, (iv) Others and compared across groups.

HEALTH AND FITNESS

On this dimension, the three groups differed significantly from one another on five out of eight variables relating to health and fitness, hence hypothesis H_{2a} is accepted. Based on this, it can be inferred that the purposive patrons were less particular about the nutritional value and the calorie content of the food they ate as compared to the others. They displayed a carefree attitude towards health and were not regular and serious exercisers. The purposive patrons wanted to remain slim only for the sake of appearance and looks. The purposive non-patrons had more leanings towards fitness but revealed moderate concern towards health. The browsers' agreement on the variables relating to health and fitness revealed that they wanted fitness more for health reasons than fashion. They showed more concern regarding health and an inclination to work towards it. Thus, browsers were both health as well as fitness conscious, in contrast to purposive patrons who were only fitness conscious. This was reconfirmed when actual details about regular exercise were collected.

Table 3: Frequency of Exercise
Chi-Square Tests

	Value	***df***	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	44.951[a]	6	0.000
Likelihood Ratio	46.531	6	0.000
Linear-by-Linear Association	26.158	1	0.000
N of Valid Cases	379.000		

Note: [a] 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.43.

Chi-square analysis revealed that there was a relationship between type of customer and frequency of exercise (Table 3).

The time spent on exercising on every occasion was found to be dependent on the type of customer group (Table 4). Purposive patrons were found to be less serious in terms of regularity, frequency, spent time on exercise as compared to others. Around 27.4% of them reported not exercising at all while 39.6% exercised less than once a week. In contrast, it was found that 32.4% of purposive non-patrons exercised more than five days a week and 31.3% exercised three to four days a week.

Table 4: Exercise Time

ANOVA (Ex. time)

	Sum of Squares	***df***	**Mean Square**	***F***	**Sig.**
Between Groups	1233.190	2	616.595	4.068	0.018
Within Groups	56984.240	376	151.554		
Total	**58217.430**	**378**			

Note: Confidence level: 95%; $\alpha = 0.05$.

In case of browsers, a similar pattern was observed where 38.7% exercised more than five days a week and 45. 2% of them exercised three to four days a week. As expected, time spent on every exercising occasion was lowest in case of purposive patrons (mean = 19.59 minutes/session) as compared to non-patrons purposive (mean=24.01minutes/session) and browsers (mean=22.46 minutes/session).

Even the mode of vacationing reiterated that the purposive patron group of customers was not inclined to physical activity. They liked vacations, which did not involve physical activity. The group also showed a high percentage (61.7%) of timeshare holiday ownership. In contrast both the other group of customers showed much less inclination towards vacationing itself, which was further reinforced by lesser ownership of timeshare holidays (purposive non patrons 20.2%, browsers 10%).

The above findings show that the 'purposive patron' was not a serious sports person, which meant that this kind of outlet was only visited by serious sports people for browsing and not for buying. All these findings further support hypothesis H_{2a} that the lifestyle in terms of health and fitness of three groups is different.

APPEARANCE CONSCIOUS

H_{2b} was supported by the fact that the three groups differed significantly on six out of nine variables pertaining to this dimension. The types of personal durables owned were compared across groups using one-way ANOVA. The three groups were found to differ significantly in terms of ownership thus supporting hypothesis H_4 (Table 5).

Agreement on variables relating to importance of looking well-dressed,

Table 5: Ownership of Personal Use Durables/Purposive Patrons/Purposive Non-Patrons/Browsers

ANOVA

		Sum of Squares	*df*	Mean Square	*F*	Sig.
WristWatch	Between Groups	43.590	2	21.795	44.217	0
	Within Groups	159.211	323	0.493		
	Total	**202.801**	**325**			
Vehicle Two-Wheeler	Between Groups	4.622	2	2.311	7.844	0.001
	Within Groups	52.741	179	0.295		
	Total	**57.363**	**181**			
Vehicle Four-Wheeler	Between Groups	4.350	2	2.175	3.967	0.023
	Within Groups	43.867	80	0.548		
	Total	**48.217**	**82**			
Mobile	Between Groups	11.522	2	5.761	9.332	0
	Within Groups	193.225	313	0.617		
	Total	**204.747**	**315**			

Note: Confidence level: 95% $\alpha = 0.05$.

desiring ownership of latest outfits, concern about clothes being fashionable, and kind of socializing clearly indicated that the purposive patrons were far more appearance and fashion conscious than the others. For them, confirmation through peer opinion relating to latest trends and fashion was paramount. Appearance was a statement of self worth for them. They possessed 'Fastrack' wristwatches, which appealed to the youth, and mobile handsets, which were a fashion statement. They also drove expensive cruiser motorbikes like 'Avenger' and street sports bikes like 'Pulsar' projecting a stylish and macho image. The purposive patrons frequented discos for socializing and multiplexes for watching movies and entertainment. They were found to be impulsive and flexible in selecting their form and time of entertainment.

In comparison, the group of purposive non-patrons owned high-end ornate lifestyle brands of wristwatches like 'Rado' and 'Omega' and owned four wheelers and were regular socialites and habitual partygoers over the weekends.

Similarly, the browsers' agreement on variables relating to fashion and appearance indicated that though they were appearance conscious, they were less fashion and brand conscious. They were also conservative in spending for expensive brands. This was further established by the fact that they owned smart, good-looking and value for money brand of wrist watches like 'Titan' and used functional models of mobile sets. They drove motorcycles such as 'Splendor' and 'Boxer', which were economic and functional. They were not compulsive socialites and frequented multiplexes for watching movies.

Shopping style: Shopping style of the three groups of customers was found to be significantly different, thus, hypothesis H_2c is accepted. The purposive patrons enjoyed shopping far more for new and novel products as compared to the others and sought variety and excitement from shopping. This inference can be drawn based on six out of nine variables on which the three groups were found to be significantly different. Purposive patrons being younger were less skeptical towards lucky draws and contests as compared to others. While shopping, the purposive patrons differed from others with regard to their attitude and concern towards the quality of the products they bought. On the other hand, the purposive non-patrons were found to be quality conscious and smart shoppers. Their expectations for quality were high and they did not mind spending time at shopping.

It was found that the groups of browser customers were conservative shoppers and selected products for their functional value. While shopping they were more likely to compare prices and look for bargains, but were not keen on promotional schemes such as contests and lucky draws.

Analysis of usage of credit cards showed no difference amongst different group of customers, which indicated that the groups did not differ in terms of preference of mode of payment while shopping. On the whole only 30 to 35% of the respondents were not using credit cards for shopping.

OUTLOOK

Comparison of means of statements pertaining to their outlook towards life using ANOVA revealed that the purposive patrons were not very different from the other two groups. They were found to be different towards their degree of faith in astrology and financial risk-taking ability. This could be attributed to the fact that purposive patrons were younger as compared to other customers and therefore, self-assured and confident in decision-making and not fatalistic. There was no difference in opinion among the groups regarding the equality of status of women both at home and work. Thus, hypothesis H_{2d} was not supported.

MEDIA HABITS

The findings revealed that of the total customers 49% acquired and 54.7% trusted information regarding this kind of stores available through word of mouth. They were less inclined to rely and seek information available through other formal modes of communications used by the store such as advertisements, celebrity launches and sales promotions. However, advertisements through print media (36.3%) were preferred over other forms of communications (14.7%). Further, the result of chi-square analysis revealed that there was no association between type of customers (purposive patrons, purposive non patrons and browsers) and sources of information gathering.

The media consumption habits of the three groups were analyzed and the

Table 6: Media Habits/Purposive Patrons/ Purposive Non-Patrons/Browsers

ANOVA

		Sum of Squares	*df*	Mean Square	*F*	Sig.
Mta	Between Groups	138.492	2	69.246	133.638	0
	Within Groups	178.765	345	0.518		
	Total	**317.257**	**347**			
Mtb	Between Groups	1.748	2	0.874	1.013	0.364
	Within Groups	257.992	299	0.863		
	Total	**259.741**	**301**			
Mtc	Between Groups	107.667	2	53.834	27.268	0
	Within Groups	629.791	319	1.974		
	Total	**737.458**	**321**			
Mtd	Between Groups	7.551	2	3.776	27.137	0
	Within Groups	45.774	329	0.139		
	Total	**53.325**	**331**			

Note: Confidence level: 95% $\alpha = 0.05$; Mta: Daily television viewing duration; Mtb: Daily radio listening duration; Mtc: Daily magazine reading duration; Mtd: Daily newspaper reading duration.

ANOVA results revealed that there was significant difference in time spent on television viewing, magazine and newspaper reading but not radio listening (Table 6). Thus, hypothesis 3a, 3c and 3d are accepted, while 3b is rejected.

When the information on average number of hours spent on television viewing and radio listening was sought, it was found that the group of purposive patron customers had maximum exposure to television (mean = 1.84) followed by radio listening (mean = 1.11).

Similarly, the purposive non-patrons reported to spending more time on watching television (mean = 1.51) than radio listening (mean = 0.99). In contrast, the browsers spent more time on radio listening (mean = 0.94) than television viewing (mean = 0.43).

The respondents were asked to specify the average time (minutes) spent on daily newspaper reading and type of newspapers read regularly. It was found that both the purposive patrons as well as the purposive non-patrons spent around 20-25 minutes on daily newspaper reading. On the other hand, the browsers spent just less than an hour on this activity. All the three groups were found to be reading more than one newspaper, one of them being an English national daily. *The Times of India*, leading national English daily was the most-read newspaper, followed by *Deccan Herald* which is the largest english language daily newspaper (in the Indian state of Karnataka where this study was conducted.) Amongst the second newspaper read, it was found that the purposive patrons read English newspapers like *Asian Age* which contains many trendy supplements focusing on topics such as movies, fashion, lifestyle and books. In the case of the purposive non-patrons and browsers, there was a higher incidence of vernacular newspaper reading in *Prajavani*, as a second newspaper. The incidence of readership (n = 19) of financial dailies was very low in all the three groups.

In case of magazine reading (weekly), the browsers spent the most time (mean = 1.46) as compared to the purposive (mean = 0.18) and the non-purposive patrons (mean = 0.42). In response to the type of magazines they read, *India Today* a popular national news magazine, was found to be a common choice across all the three groups. The purposive patrons' first choice was women's fashion magazines such as *Femina* a woman's magazine dealing with issues related to beauty, fashion, cooking, new lifestyle products; and *Cosmopolitan*. They also read film magazines like *Filmfare*. Both the browsers and purposive patrons read specialty magazines but the former read magazines such as *Chip* and *PC World*, while the latter read magazines like *Autocar India* which give details about the latest developments in cars and bikes.

It can be concluded that the media consumption habits of all the three groups were reflective of their personality traits. Based on the above analysis, Table 7 provides a comparative view of all the three groups on different indicators. These indicators can be used by a retailer for developing a retail strategy. A profile of the customers visiting the store has been developed using the distinct characteristics of the three groups as seen in Table 8.

IMPLICATIONS FOR THEORY AND PRACTICE

The study has been successful in achieving two objectives. Firstly, the study premise of using 'purpose of visit' along with patronage as a basis for grouping customers proved meaningful in highlighting the differences in their profile. The results revealed unique characteristics of patrons and non-patrons and browsers of single brand sport stores. Thus, going beyond just identifying patrons was appropriate as this classification provides retailers a sharper focus on the purposive patrons who are much more likely to become their revenue generating segment. The purposive patrons represented 49.7% of the total sample accounting for a sizeable number so as to become commercially viable.

Secondly, the study confirmed that it was appropriate to examine both demographic and psychographic variables of the customers for profiling. The purposive patrons, purposive non-patrons and browsers were not found to differ significantly in terms of age, income and occupation indicating that for a retailer to understand the characteristics of his customers it would not be just sufficient for him to use only demographic variables.

The findings validate some conclusions reached in earlier studies that lifestyle variables and media habits are better indicators for segmenting customers (Darden and Ashton, 1974-75; and Crask and Reynolds, 1978).

This study has shown that this was true even in the Indian retail context. The rapidly changing face of Indian

Table 7: Some Demographic, Lifestyle and Media Indicators of Customer Groups

Indicators	Purposive Patron	Purposive Non Patrons	Browser
Demographics	Young adult, male, majority students with annual family income more than Rs. 4.5 lakh.	Majority young adults, employed in private service or students, affluent households income more than Rs. 4.5 lakh.	Majority young adults, employed in government service or students, affluent households income more than Rs. 4.5 lakh.
Activities	Novelty and venturesome shopping, enjoys taking vacation, watching movies, loves dressing up, partying and chilled out socializing. Exercise was not a favorite activity.	Formal partygoers. Not fond of vacationing. Moderate exercisers.	Watching movies at multiplexes Not fond of vacationing. Bargain seeking.Regular exercisers. Reading and radio listening.
Interests	Fashion, appearance, quality shopping at all costs, fun, excitement, food, self-indulgence.	Fashion, appearance, quality shopping.	Health, fitness, low calorie healthy food, value for money shopping, outdoor activities.
Opinions	Not price conscious, self assured, liberal, broad minded, no gender bias, non-believer in astrology.	Slightly price conscious, self assured, liberal, little belief in astrology, no gender bias.	Price but not brand conscious, little belief in astrology, no gender bias.
Possession	Own expensive trendy sporty watches, cruiser motorcycles and gearless scooters, latest fashionable mobiles, family ownership of time share holidays. Most own at least one credit card.	Own high-end lifestyle watches, four-wheeler, status symbol mobiles, few owned time share holidays. Most own at least one credit card.	Own smart functional watches, economic motorcycles, functional mobile sets and very few owned time-share holidays. Most own at least one credit card.

retailing along with variety of formats is providing consumers with unlimited options to shop from. The Indian retailer is finding it increasingly difficult to retain his customers. Any retailer wanting to understand the profile of his customers for the purpose of customizing his offer must get insight about the differences in their activities, interests and opinions as they provide a more meaningful, distinctive and actionable differences.

The profiling of the customers clearly indicates that these kinds of shops in India are perceived as up market, expensive, fashionable and young. The purposive patron segment is young and looking for trendy products more for good looks and aesthetics rather than actual functional usage. This has implications for a retailer of such outlets in terms of decisions relating to the kind of merchandize. His preference for new products and

Table 8: Profile of Customer Groups

Purposive Non-Patrons	Browser	Purposive Patron
Majority Young Adults	Majority Young Adults	Majority Young Adults
Private Service and Students	Government Service and Students	Students
Affluent households	Affluent households	Affluent households
Word of Mouth most trusted and used source on information	Word of Mouth most trusted and used source of information	Word of Mouth most trusted and used source of information
Appearance is a statement of self worth	Not fashion and brand conscious	Appearance is a statement of self worth
Pretentious and image conscious	Not pretentious	Fashionable, trendy and image conscious
Fitness conscious, moderately health conscious	Health and fitness conscious	Fitness conscious but not health conscious
Sophisticated socialite	Not a regular socialite	Chilled out socializing
Quality conscious but smart shopper	Quality and cost conscious	Quality at any cost
Laid back and not very adventurous	Preferred outdoor and adventurous activities	Watching movies, meeting friends, not interested in serious sports
Self-assured and confident	Confident	Self-assured and confident

viewing shopping as a fun activity are also inputs for retailers' display and stocks policies. The window display as well as the in store display needs to be frequently changed and must display new and attractive merchandize.

In store experience is critical as word of mouth was the most used and trusted source of information. Advertisements in women's fashion magazines, and fashion supplements of newspapers are likely to get noticed much more than those appearing in other type of magazines or newspapers. Similarly, the responsiveness of the purposive patrons to sales promotions can be used for designing sales and marketing strategy. Their profile can be used for initiation of appropriate loyalty programs by the retailer for targeting and retaining the purposive patron.

CONCLUSION

It is one of the first Indian studies, which deals with the concept of identifying the revenue-generating customer. Typically, a store of this type had a very high footfall, but the retailer was unaware of the profile of their real customers. A detailed profile of their revenue generating customers would be useful to retailers for attracting and retaining profitable customers. Defining and profiling the target customer enables the retailer to make effective decisions relating to his store.

The major issues examined in this study were: (1) Profiling of the customers visiting the stores; (2) Identification of differences between the groups based on demographic, lifestyle variables and media habits; (3) In turn identifying a group of revenue generating customers; and (4) Drawing implication for the retailer.

Statistically significant differences were found between the groups along were a number of activities, interests, opinions and characteristics. The purposive patrons and browsers differed across health, fitness, fashion, entertainment and shopping style dimension. The browsers were distinctly health and fitness conscious and less fashionable, while the purposive patrons were fitness conscious only to be fashionable.

The results of this study have direct managerial implications. This study is just a first step towards defining and understanding customers in the emerging Indian retail sector and provides directions for future research. Understanding the inter-relationship of store choice reasons and the profile of the customers in future would provide with rich and interesting data for the retailer. A study comparing the profiles of customers of single brand store versus multi-brand outlets would provide an interesting and enriching insight. Similarly, profile of customers across different type of retail formats across markets could be examined.

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Consumer Preferences: A Case of Indian Wristwatch Market

*Venkoba Rao**

In a period of rapid evolution, the Indian market, fuelled by new WTO norms has become the focal point of wristwatch business providing ample opportunities for growth. The impact resulted in companies nurturing newer products and channels, while their promotion efforts enhanced consumer expectations. As consumers make quantum leaps in their watch knowledge and sophistication leading to complex buying behavior, companies are finding newer ways to find their pulse. This paper studies preferences of middle class consumers while making a watch purchase decision in this changed environment. The study reveals that consumers prefer branded watches that are of Indian make in round or square shape offering 1-2 years or above warranty in the price ranges below Rs. 1000 and Rs. 1000-3000. 'Need-based' purchases are made from company showrooms/authorized outlets on cash payment. The preferences of male and female consumers do not differ much. The young consumers are more conscious about their preferences compared to the middle-aged and older consumers. Though widely exposed to international trends, consumers are price conscious and prefer to buy only affordable branded watches through extensive search.

INTRODUCTION

The fast evolving Indian market is one of the most promising in the world and so is the Indian consumer. Rising incomes, multiple income households, exposure to international life styles and media, easier financial credit and an upbeat economy are the key drivers enhancing consumer aspirations and consumption. India, with over one billion people comprising of different segments of consumers, based on class, status, and income, is a huge and lucrative market. This market is undergoing a sea change and the impetus to growth is fuelled by qualitative changes in the consumers' preference. There has been a significant increase in awareness among the Indian consumers. They are discerning and are beginning to demand. Their spending has increased and the way they spend on various items too has changed in the recent years. Having become much more open-minded and experimental in their perspective, a discernible shift in their preference in favor of higher-end, technologically superior branded products can be noticed (India Consumer Trends, FICCI, 2006). The rising rate of growth in disposable income with higher propensity to consume has changed the

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lifestyles and the socio-economic environment of the market. An interesting fact is that the Indian market has a substantial middle class, that is roughly estimated at 250 million people with a sizable disposable income. The middle-income group ($1,162-$1,190) spends more on consumer expendables than the rich do, thus contributing significantly to the changes in the market. Combined, the middle and the lower income group provide 60% of the value of the Indian market (Consumer Outlook, 2006). This income-related population class has its own consumption pattern and behavior. Data of these patterns serve as an important indicator for forecasting and understanding consumer behavior. In fact, it becomes imperative for companies to understand the preferences of these customers, which will enable them to embark on strategies of effectively reaching them (Green and Wind, 1975). This research attempts to study the preferences of the Indian middle-income group consumers with specific reference to the product category—wristwatches.

A BRIEF REVIEW OF INDIAN WATCH MARKET

Times are changing. Watches are no longer time-keeping devices performing its basic function but have become an adornment that characterizes the personality and preference of those who wear them. These elegant pieces that accurately measure an interval of time, down to a fraction of a second have stood the test of time and now carry a lot of symbolism. Going beyond its generic role, it now focuses on performing a voguish role as a fashion accessory that helps in making a self-expressive style statement.

The Indian watch market has matured over the years and has seen a paradigm shift, keeping abreast with international trends. With the withdrawal of quantitative restrictions on watch imports, since April 2000, the dynamics for watch business have completely changed. The Rs. 2,400 cr Indian wristwatch market, with organized sector representing just over 50% has been revitalized by deregulation, with major national and international companies taking newer positions (Trade Post, 2007). Companies are fast exploiting the potential for product-offering through the direct input route and leveraging their global technology, product lines, distribution efficiencies maintaining cost advantages. Amidst a major reorganization, the Indian market is expected to move closer towards realizing its potential.

This influx has been advantageous to the Indian consumers as their expectations were enhanced with exposure to global brands, styles and various price levels. Consumers have evolved considerably with time and their aspirations are now global. The market metamorphosis has given them the power to choose. Consumers have made quantum leaps in their watch knowledge and sophistication as companies took steps towards educating them, both in terms of look and feel for time wear through intelligent promotions. The market has become more active, attracting a broader audience, gradually expanding to newer horizons ushering a New World.

CONSUMER PREFERENCES FOR WRISTWATCHES

There is a lot of personal preference with a watch. As the choices available to the customers have widened considerably, choosing has become intriguing. Consumers are faced with a whole range of factors driving the purchase equation that can bring personal, emotional and intellectual satisfaction and enjoyment. They reach their final purchase choice ,not on a single attribute but on multi-attribute, by examining a variety of features or attributes and performing a complex series of trade-offs. They evaluate each attribute separately and depending on the satisfaction related to each attribute and the relative weight of the attributes, assign value to the product (Philip Kotler, 2003). It is important for companies to determine the most favorable features for their product that can optimize the level of satisfaction. In this scenario, consumer-buying behavior has become a complex phenomenon. Understanding consumer psyche, introducing products suiting different tastes, offering value, creating an experience and delighting customers would be the key to stay in the market (Quester and Smart, 1998). Since, watch as a product has become more heterogeneous with attribute levels being extremely varied, consumer preferences need to be understood by examining the various factors that might help companies to satisfy customers in times to come.

OBJECTIVE OF THE STUDY

To study the preferences of Indian middle class consumers while making a watch purchase decision in a changing Indian market situation.

RESEARCH METHODOLOGY

SAMPLE

The gross sample size of the survey is 106 people. The study was conducted in the city of Hyderabad. Hyderabad is one of the main cities in India and is the capital of Andhra Pradesh. Systematic random sampling is used. The sorting system of the sampling frame is based on geographical population density. Since, the focus of study is on the preferences of growing urban middle class towards wristwatches, only middle class segment was considered. To account unbiased preferences, spontaneous and experiential responses were considered from wristwatch owners. The survey was conducted during the weekdays, from 10 am to 6 pm during the months of November and December 2006.

DATA COLLECTION TECHNIQUE

The study was carried out using the survey approach. A self-administered questionnaire was developed and utilized to elicit data from the sample respondents. The five page questionnaire has two sections. The first section has questions, which attempt to gauge a number of issues related to purchasing wristwatches. On the basis of literature survey, the various influencing attributes were arrived at. 18 attributes with suitably defined levels, totaling up to 70 factors were incorporated into the questionnaire. The respondents were to rate each of the product attributes on a score from 0 to 10, where 10 represented the highest degree of preference. A draft questionnaire was made and tested on a sample of 30 consumers. This exercise ensured the adequacy and communicability of the questions in the questionnaire. The language in the questionnaire was made simple, clear and free from technical jargon. Adequate care was taken to see that the consumers did not misunderstand the questions. Based on the feedback obtained from these respondents, the final version of the questionnaire was developed. The language used was English. In the second section, demographic questions were asked. Due to the personal nature of the information sought, this section was placed at the end of the interview, in order to reduce any possible resistance from the respondents to participate in the survey.

DATA ANALYSIS

The consumer questionnaire data was analyzed using the statistical package SPSS version 14.0. From the ranked data of respondents, the importance of an attribute is calculated by examining the range of utilities across all levels of the attribute. Range is the difference between the lowest and the highest utilities. It represents the maximum impact that the attribute can contribute to a product (Orme, 2002). Based on the range and value of the utilities, seven relatively important attributes have been identified on rank order basis. They are brand preference, shape of the watch, price category, outlet preference, need for purchase, mode of payment and warranty. Each of the selected attributes had either two or three levels.

Later, multiple regression analysis was performed. The respondent's ratings for the product concepts form the dependent variable. The characteristics of the product are the independent variables. A procedure called dummy coding for the independent variables was used. For estimating utilities, the data was coded with '1' to reflect the presence of a feature and '0' to represent its absence. To avoid a situation of linear dependency, one column from each attribute was omitted. Individual preference profiles containing the relative importance of each attribute and the preferred levels within each attribute were derived. A total of 2,968 alternatives were tested for 7 attributes. The data was also analyzed by gender, i.e., male and female categories and by age groups of 18-25, 26-35 and 36-50.

RESULTS AND CONCLUSION

The data was examined by Analysis of Variance to determine the overall significance of the regression equation. The F-value is 56.799 indicating that the model is significant at p-values less than 0.05.

The Table 1 shows the multivariate regression coefficients with three different variations. Regression 1 includes all the independent factors that might affect the consumers' purchasing decision. Regression 2 and 3 include additional control variables namely age or gender.

The findings provide some interesting insights on consumer preferences for wristwatches in the current market environment in India. The following main conclusions are drawn.

The most important attributes influencing purchase of watches were brand (Indian), shape (round), price

Table 1: Table Showing Regression Results of the Factors

Factors	Regression 1		Regression 2		Regression 3	
	B Coefficients	*t*-value	B Coefficients	*t*-value	B Coefficients	*t*-value
Branded Watch	5.162	15.193	5.162	15.191	5.162	15.200
Indian Brand	4.596	13.527	4.596	13.525	4.596	13.533
International Brand	1.633	4.808	1.633	4.807	1.633	4.810
Round Shape	3.690	10.861	3.690	10.860	3.690	10.866
Square Shape	2.643	7.779	2.643	7.778	2.643	7.782
Rectangle Shape	1.199	3.531	1.199	3.530	1.199	3.582
Oval Shape	1.067	3.142	1.067	3.141	1.067	3.143
Below 1,000 Price Range	3.228	9.501	3.228	9.499	3.228	9.505
1,000-3,000 Price Range	2.765	8.140	2.765	8.139	2.765	8.144
Above 5,000 Price Range	–1.102	–3.245	–1.102	–3.244	–1.102	–3.246
Company Showroom/ Outlet	4.954	14.582	4.954	14.580	4.954	14.589
Authorized Retail Outlet	3.747	11.028	3.747	11.026	3.747	11.033
Custom Notified Shop/ Outlet	1.162	3.419	1.162	3.419	1.162	3.421
Online/E-Shops	–0.895	–2.634	–0.895	–2.634	–0.895	– 2.635
Need Based Purchase	4.294	12.639	4.294	12.636	4.294	12.644
Purchase on New Watch Introduction	0.049	0.143	0.049	0.143	0.049	0.143
Purchase Due to Ad. Effect	0.086	0.253	0.086	0.254	0.086	0.254
Cash Payment	5.728	16.859	5.728	16.857	5.728	16.867
Credit Card Payment	–0.150	–0.440	–0.150	–0.440	–0.150	–0.441
One to Two Years Warranty	4.577	13.472	4.577	13.469	4.577	13.477
Above Two Years Warranty	3.039	8.945	3.039	8.943	3.039	8.948
Gender			**0.018**	**0.128**	**0.028**	**0.194**
Age					**–0.016**	**–2.127**
Dependent Variable: Preference						
***F*-Statistic**	**56.799**		**54.200**		**52.102**	
R-Square	**0.288**		**0.288**		**0.289**	

category (below Rs. 1,000), outlet (company showroom), purchase need, mode of payment (cash payment) and warranty (1-2 years). The study indicates that these are the primary attributes that represent the true desires of the consumer guiding their purchasing behavior. It is found that consumers perceive brand as important and see a major difference as far as Indian and International brands are considered. International brands have a lower preference, especially considering the entry of new international players after deregulation. Their entry in the watch trade has increased advertising and promotion but has failed to create interest in their watch product categories. This suggests that domestic brands have actually created a niche for themselves without really getting disturbed by the foreign invasion. Warranty is also an important influence on purchase, followed by round and square shapes. Companies typically offer only limited 1 year warranty on their products, while consumers look for longer warranty periods. To give customers a greater level of confidence, companies may think of extending the warranty to an additional one or two years. This will also help prevent the tactics of unauthorized dealers. Square watches are on a high (Trade Post, 2007) and round watches showed no sign of slowing down. Companies can introduce new products and upgrade existing models and renovate current collections taking a cue from this.

Company showrooms and authorized retail outlets play a defining role in the consumers' purchasing choice. Consumers perceive that company showrooms/ authorized outlets are the safest way to acquire a fine watch and negotiate their best purchase deal. This shows a low risk-taking behavior of the consumers. Thus, the thrust is on strengthening and expanding organized distribution. Companies can have a key differentiation through retail outlets by creating a fantastic retail experience. The study reveals that the consumers prefer segments below Rs. 1,000 and between Rs. 1,000-3,000. Going by their responses, it appears that consumers display value for money consciousness over expensive watches. Though the consumers were in general, price sensitive, the study also revealed that the consumers also prefer wearing branded watches. This indicates that consumers prefer branded products that were also affordable. Since, price can be the biggest differentiator in a price sensitive environment, companies can bring out branded products in an affordable price range. Cash as a mode of payment is also the most important influencer. Though credit cards are slowly gaining popularity in the market, cash payment is preferred most by the consumer, while purchasing watches.

Findings indicate that advertisement effect and new watch introduction have little impact. This shows that consumers are 'conservative' and they buy only when they need to buy and are not unduly swayed away by persuasive advertising or new brand introductions. Consumers have no preference for internet shopping and for watches priced above Rs. 5,000. There has also been less emphasis on oval and rectangle shapes by consumers.

From the results on the comparative analysis of male and female categories, it was found that they do not differ much in their preferences. On the contrary, there is a significant difference in preferences, when age as a variable is taken into consideration. The preferences of people between the age group of 18-25 are different from that of the other age groups 26-35 and 36-50. The difference in preferences of the young group is noteworthy. The younger (18-25 years) consumers have higher levels of preference, when compared to middle-aged (26-35 years) and older (36+ years) consumers.

To conclude, the dynamics of the market has rapidly changed in a short time frame. It has given consumers greater choice and better products, while throwing greater challenges to market participants. This study reveals a few insights that are imperative for companies to understand customers. Organizations can leverage their strengths by having a look at these findings for creating value addition to the customers resulting in a win-win situation.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

While attempting to generalize the findings, caution must be exercised as the study was conducted with a few limitations. First, due to the limitations of mobility and time constraints, the study was limited to city of Hyderabad only and so the results need to be looked at from this perspective. Secondly, a restricted sample of 106 consumers, drawn from a stratum that represents only the urban middle class segment of the total population was considered. In future, the study can be expanded to a cross section of cities and towns with a larger sample, which may reveal differences if any, in respondent preferences. Nevertheless, organizations can use these results to design strategies by focusing on the factors that were arrived at.

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Case Study

Value Stream Mapping of Truck Operations: A Case Study

B Vittaldasa Prabhu[1]**,** *Ramesh D*[2]**,** *Amar Surekha*[3]**,** *Arun J Holla*[4] **and** *Kalpesh M Patel*[5]

The Indian truck transport industry which is a Rs. 2,10,000 cr industry is in doldrums due to the disorganized nature of their operation. The disorganized nature of the industry demands external analytical support to assist this industry. The current work analyses that of truck transportation using value stream mapping to identify wasteful activities to improve the flow in truck transportation followed by the quantification of the same with the process ratio.

INTRODUCTION

The transportation sector is a key enabler of the economic growth of any country. In India too transportation is playing a major role in the economic growth of the country. According to a report of Multilateral Debt Relief Initiative (MDRI) (2006), road freight traffic in India is 2,304 Bullion Tonne Kilometres (BTKM) and constitutes 77% of the total goods transported. The ongoing road development projects undertaken by the government of India like golden quadrilateral and the North-South and the East-West corridor projects, indicate that the road freight industry will continue to be the prominent mode of goods transportation.

However, the truck transport sector is affected by this disorganized structure with 77% of the trucksters owning less than 10 trucks. Many of them are single truck owners who are also the truck drivers (Prabhu, 2004). Apart from these, many more issues led to inefficient and ineffective operation of the industry reducing the overall equipment effectiveness (Prabhu and Murali, 2005).

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Many of these truck operators are either illiterate or educated only upto secondary school, making it impossible for them to adopt the latest management practices like lean manufacturing, for improving their operations. Prabhu and Murali (2007) explain adopting of lean manufacturing techniques to improve the flow in truck transportation. As part of customer relationship management initiative, Original Equipment Manufacturers (OEMs) of trucks like Ashok Leyland are already working on several initiatives in assisting the trucksters to be productive. The current work is one such initiative that uses the value stream mapping to detect the current level of value addition.

A web-base article, Step-by-Step guide to Value Stream Mapping (2008) defines it as a tool commonly used in lean continuous improvement programs to understand and improve the material and information flow within the organization. VSM borne out of the lean ideology captures and presents the whole process from end to end in a method that is easy to understand by those working the process—it captures the current issues and presents a realistic picture.

Through a simple to understand graphical format, future state (a diagram showing an improved and altered process) can be formulated and defined. The method encourages a team approach and captures the performance measurement data to constructively critique the activity. Participants in the activity are encouraged to suggest improvements and contribute towards and implement an action plan.

As with any lean management toolsets, the principle aim of VSM is to improve processes. This is achieved by highlighting areas of waste within a process and therefore enabling businesses to eliminate these activities. Value Stream Mapping also has the benefit of categorizing process activity into three main areas—value added, pre-requisite (non-value added but necessary) and waste.

CURRENT VALUE STREAM

The truck operation in general consists of four major activities namely:

- Identification and getting the load,
- Reaching the loading point and loading of the truck,
- Moving the goods to the destination,
- Reaching the unloading point, unloading the goods and collecting hire charges.

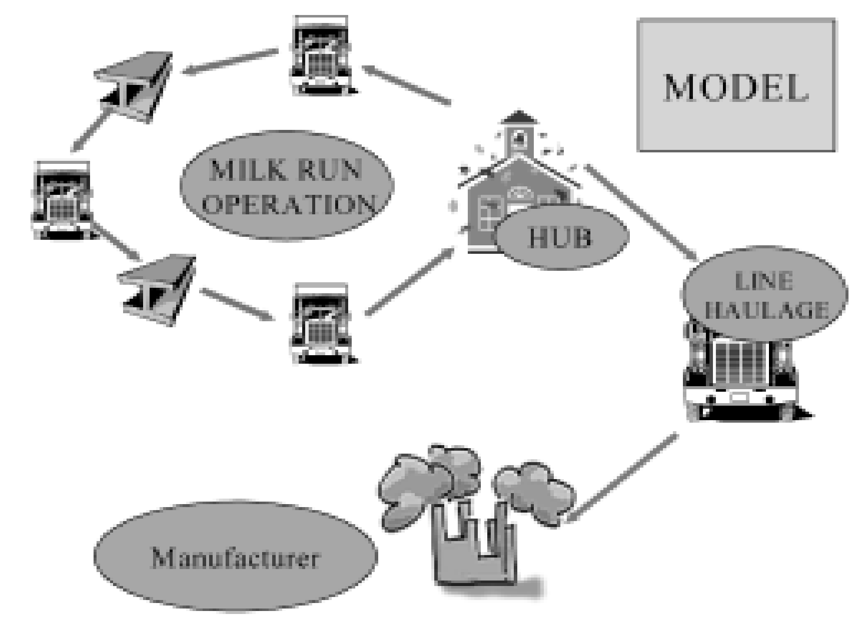
Though the process looks simple with only four major activities, they are very complex with several stakeholders who optimize their earnings at the cost of the system optimization.

Current study is carried out with the truck operation of a logistics company that moves the auto components from the suppliers to the plant (manufacturer). It is a combination of milk run and the line haulage as shown below in Figure 1.

The information flow is as follows:

- Manufacturer releases a weekly schedule of auto components to the logistics company and the suppliers.
- Final modified list of components and corresponding suppliers is provided by

Figure 1: Truck Transport Model Considered for Study



5 pm of the previous day to the call center of the logistics company by the manufacturer, which in turn pass on the information to its hub.

- The material collected details are compiled on the subsequent day evening by the logistics company and passed on to the manufacturer.

The material flow of the operation is as follows:

- Truck reports at the supplier, collects the material and documents the details.
- The materials collected from the suppliers are transported to the hub, unloaded and arranged according to the line (manufacturer).
- The regrouped materials are loaded to the corresponding line haulage truck.

The documentation details are as given below:

- Schedule released by the manufacturer is in tabular format and contains details such as supplier name, part number, quantity, category and remarks.
- Supplier raised documents are invoice, excise documents and delivery chalan.
- Transporter released documents are cargo way bill for milk run and manifest for the line haulage containing load details.

Chennai-based suppliers covered by the logistics company and categorized into five routes for milk runs as A to E. Route B is the longest covering 11 suppliers and a distance of 85 kms. The details are provided in the Table 1.

Travel duration is the value added time against the other non-value added times and activities. Two of the 11 suppliers were

Table 1: Activity Time Table of the Milk Run of the Route B

Supplier	Distance	Travel Duration	Waiting	Loading/ Unloading	Documentation	Remarks
B1	17	42	3	26	2	
B2	4	17	7	0	0	Load was not ready
B3	0.3	6	4	13	2	
B4	1	3	2	0	0	Load was not ready
B5	4	10	12	5	2	
B6	1	3	0	15	2	
B7	0.5	5	0	3	4	
B8	4	8	0	3	2	
B9	0.2	3	0	5	3	
B10	5	24	33	5	3	
B11	5	18	40	36	3	Loading time of 26' and unloading time of 10'
Return to Base	14	35	0	0	0	additional 25' for lunch

Table 2: Comparison of Actual Time versus Allotted Time for the Milk Run

Supplier	Actual Time	Actual Time	Time Taken	Allotted Time	Allotted Time	Duration Allotted	Reach on Time or Late	Extra Time Taken
In	**Out**	**(in min)**	**In**	**Out**	**(in min)**			***n***
B0, HUB	8:50	9:25	35	8:50	9:00	10	On Time	25
B1	10:07	13'	31	10:05	10:25	20	Late by 2'	11
B2	10:55	11:02	7 (No load)	10:45	10:55	10	Late by 10'	NA
B3	11:08	11:27	19	11:00	11:15	15	Late by 8'	4
B4	11:30	11:32	2 (No load)	11:25	11:40	15	Late by 5'	NA
B5	11:42	12:01	19	11:55	12:05	10	Before by 13'	9
B6	12:04	12:21	17	12:10	12:25	15	Before by 6'	2
B7	12:26	12:33	7	12:35	12:40	5	Before by 9'	2
B8	12:41	12:46	5	12:50	12:55	5	Before by 9'	0
B9	12:49	12:57	8	13:00	13:05	5	Before by 11'	3
B10	13:21	14:02	41	13:15	13:30	15	Late by 6'	26
B11	14:45	16:04	79	14:30	15:30	60	Late by 15'	19

not ready with the load. Further, it is necessary to check the actual time taken at the suppliers against the allotted time. The details are provided in Table 2.

Delay of 101 minutes was recorded in 10 of the 12 trips that are productive (two of suppliers were without the load). The time taken for the subsidiary activities such as loading/unloading and documentation is about 1.63 times the allotted time apart from the wastage of effort and time at two suppliers where load was not ready.

To draw the value stream, map the transport time considered as value added time against the others such as loading/ unloading, waiting and documentation as non-value added time. The entire transport operation is split in two namely the milk run and the line haulage. The value stream of the milk run part is shown in the Figure 2.

Referring to the current value stream, the value added time is 174 min. against the total time of 444 min. The process ratio is the ratio of value added time and total time and is 39.2%. The process ratio reduces further, taking in to consideration another trip which takes to and fro time of 136 min. to collect the material that was not ready at suppliers B2 and B4 to 30%.

Similar exercise to map the current state of the line haulage part of the transportation was carried out. Table 3 provides the details.

The transport time has both value added and non-value added time due to slower speed than the expected least speed of 50 kmph. Current value stream map shown in Figure 3 is drawn for the line haulage similar to the milk run part and has the transportation time (value added time) of 368 min. against the total time of 992 min. leading to a process ratio of 37%.

THE FUTURE VALUE STREAM

In the transport system, transportation is the value added activity and other activities including prerequisite activities are the non-value added activities. Developing future value stream involves identification and elimination/reduction of Non-Value-Adding (NVA) activities in the value stream to improve the process ratio and thereby making the transport operation lean.

Considering the milk run of the logistics vehicle, the NVAs identified are loading/unloading, waiting, documenting,

Figure 2: Current Value Stream Map of the Milk Run for Route B

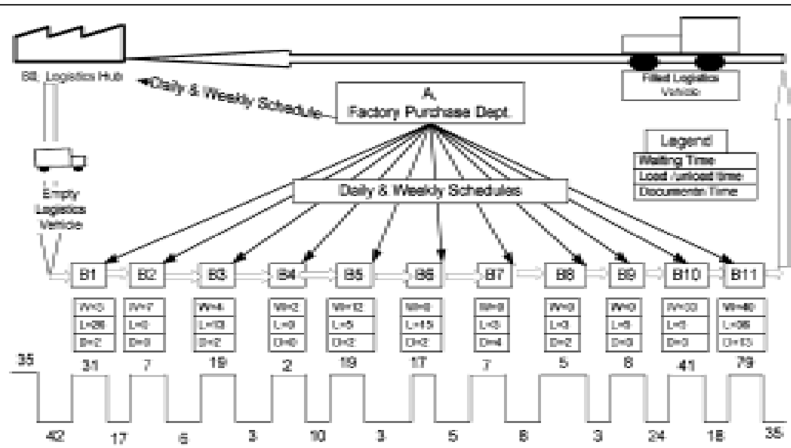
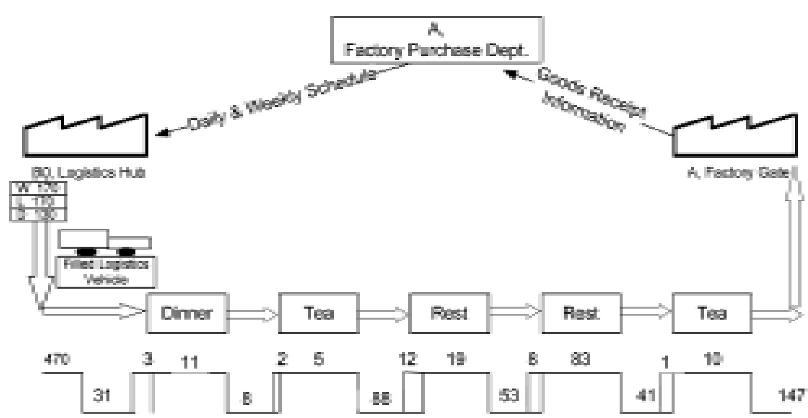


Table 3: Activity Time Table of the Line Haulage

Activity	Time (in min.)		Time Taken (in min.)	Distance Traveled	Average Speed (kmph)	Value Added Transport Time	Waste due to Speed Loss @50 kmph
	Start	End					
Waiting for Load	19:00	21:50	170	–	–		
Loading	21:50	00:40	170	–	–		
Documentation	22:00	00:10	130	–	–		
Vehicle Started from Logistics Hub	00:40	–		–	–		
Transportation	00:40	01:14	34	25.5	45	31	3
Dinner Break	01:14	01:25	11	–	–		
Transportation	01:25	01:35	10	7	42	8	2
Tea Break	01:35	01:40	5	–	–		
Transportation	01:40	03:20	100	73	43.8	88	12
Rest	03:20	03:39	19	–	–		
Transportation	03:39	04:40	61	44	43.2	53	8
Rest	04:40	06:03	83	–	–		
Transportation	06:03	06:45	42	34	48.5	41	1
Tea Break	06:45	06:55	10	–	–		
Transportation	06:55	09:30	147	132	54	147	0

Figure 3: Current Value Stream Map for the Line Haulage



rest, communication (poor), rearranging of the load in the truck, idle time due to computer/Internet failure and non-availability of load at the supplier end. To avoid waiting, suppliers are to be convinced to make the material ready for loading before the vehicle reaches them. In case of failure to do the same due to emergency reasons, they should communicate the same to the truck driver. Documentation and loading/unloading should be done simultaneously to save time. Use of driver for loading/unloading is ineffective as it prevents simultaneous loading and documentation. Also having separate personnel can save truck and material delay. Use of extra manpower for loading / unloading is justified by the simple fact of high truck-hour cost and material delay cost in comparison to the man-hour cost.

Though many other prerequisite activities are desired for successful transportation, their duration can be reduced. Loading and unloading can be reduced through the use of better material handling devices and also applying cross-docking concept. Multiple handling of the goods in the truck too takes longer time while loading/unloading and hence requires pre-planned locations for the material received from various suppliers. However, these improvements are not considered as they can be visualized only after implementation. Further, adhering to the schedule by the suppliers can save the rework time by the truck making a dedicated trip to collect the material later. The future state map drawn with considerations to no delay and simultaneous loading and documentation is shown below in Figure 4. The process ratio of the proposed future value stream for the milk run of route B is 52.1% an increase by 12.9%. The other improvements that could not be quantified at this stage may bring similar improvements in the process ratio.

In the line haulage system, disorganized methods of the driver are the major reason for the low process ratio. Following a planned trip and well defined rest and tea breaks are beneficial. Major delay and waiting was due to:

- 170 min. of delay by Route D milk run vehicle followed by route B
- 30 min. for dinner.
- 30 min. due to the rain.
- Delay in documentation by 40 min. due to computer/printer malfunction.

As per the current value stream, the first tea break was taken by the truck driver after just 11 minutes of taking a dinner break. This could have been one hour after of dinner or combined with

Figure 4: Future Value Stream for the Milk Run of Route B

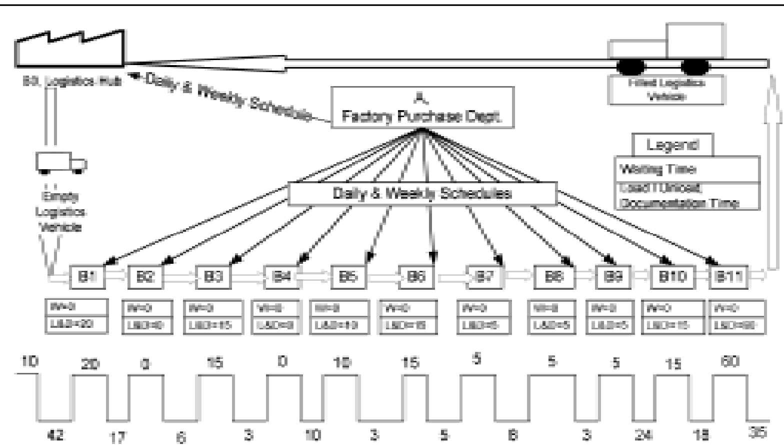
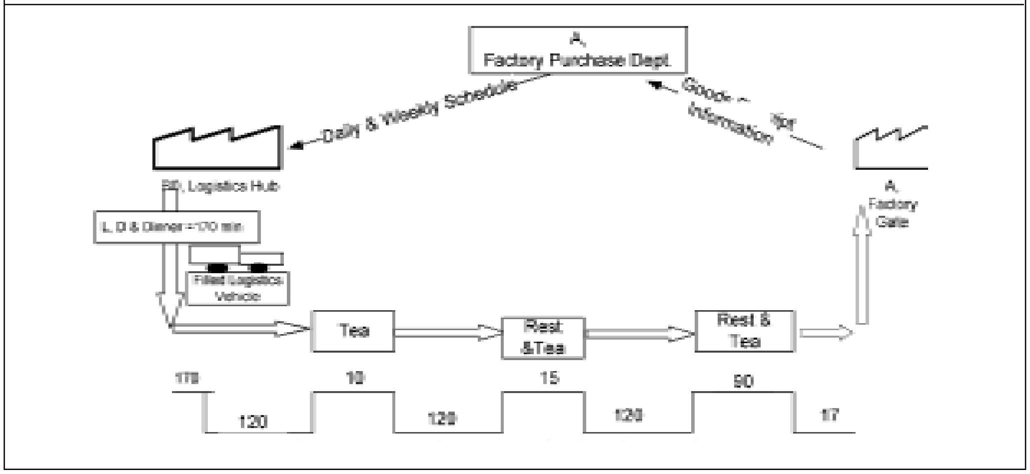


Figure 5: Future Value Stream for the Line Haulage



dinner itself. Planning the number of breaks and their duration will improve driving speed, reduce driver fatigue and save fuel. From Table 2, it may be observed that when the truck was driven for longer time, the speed was 54 kmph. With a conservative speed of 50 kmph needing 379 min. of drive, the future value stream is as follows in Figure 5. The new process ratio is 57% up by 20%. Overall, total haulage time reduces from 992 min. to 662 min.

CONCLUSION

Inbound logistics is an integral part of any manufacturing system and improvement in the same makes the manufacturing system effective. To improve the logistics operation, value stream mapping was used and a case study of a logistics route was studied. In the first part of the study, milk run process ratio can be improved by 13% while the line haulage process ratio will improve by 20%.

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APPENDIX

TEACHING NOTE

Case studies always deviate from the ideal situations due to the practical difficulties and so in this case study. Most of the value stream mapping is applied on the shop floor and the concepts can be applied without much difficulty. Faculties may see this case study as an example of application of value stream mapping to service. This particular paper takes a case of a service of truck transportation where the value addition is due to the change of place by transportation that considered being waste conventionally. Then, items like inventory do not exist in transportation. Should the speed gap of the truck (rated speed-actual speed) to be considered as inventory? Though this was thought about, to simplify the concepts simpler ways were arrived at. In the future value stream too there are certain subjective elements such as nature and duration of rest breaks. Unlike VSM for manufacturing where the environment remains same, for this case they are variable and depend upon the route, day and time. Focus should be to eliminate the peak hours on the road. Academically, some difficulties were faced in identifying the icons, terminologies for drawing the maps.

Book Reviews

The Design of Things to Come: How Ordinary People Create Extraordinary Products

By Craig M Vogel, Jonathan Cangan and Peter Boat Wright

Pearson Education/Wharton School Publishing, New Delhi, 2005; p. 237; Rs. 499

ISBN: 0-131-86082-8

What does it mean to deconstruct the process of innovation? While there is no shortage of books on innovation, not too many books address how interdisciplinary teams can help 'ordinary people create extraordinary products', making it thereby possible for a company to move from a cost-centric strategy to one driven by innovation. The goal of this book is to set out the modalities to make innovation an organic process within a company since, according to the authors, that is 'the only way the core of your brand can be strategically connected to every product you make and service you provide (p. xxv).' The book focuses on people involved in innovation as designers/producers and as users; it uses fictitious scenarios in an attempt to provide context for each of the chapters along with accounts of how real people participate in the innovation process. These 'scenarios are often composites that represent critical aspects of the lifestyle tendencies of the intended market (p. xxv).'

The importance of innovation, needless to say, is that it is the only way by which companies can avoid the trap of 'cost-focused commoditization (p. xxvi).' Innovation then is to contemporary management what 'quality' was to manufacturing a couple of decades ago. The authors add the adjective 'pragmatic' before the term 'innovation' to focus on the customer's point of view rather than on the producer's point of view. In other words, what may be an incremental innovation or a mere recombination of technology may still be satisfactory from the point of view of the customer since innovation must be 'marketable and profitable (p. 24).' Otherwise, it is an invention and not an innovation.

The three factors that drive pragmatic innovation are 'social change, economic situations, and technical advances (p. 27).' Ford's redesign of its best-selling truck, the F-150, is an interesting case study in innovation. Why is Ford willing to redesign the truck every seven years

Note: Readers are encouraged to send reviews especially of books which may not have been published in India to the Editor.

even though it is the market leader? Why risk tinkering with a product that has sold over 30 million units since 1982? All the three factors listed above are the reasons for not resting on the company's laurels. But one interesting reason is that in this period the very concept of a truck had to be rethought due to the evolution of customer preferences. In the 1990s the truck had ceased to be merely a 'workhorse;' instead, due to the influence of SUVs, it took on a lifestyle dimension. Ford therefore decided to offer the F-150 with a new notion of market segmentation including luxury versions (to cater to customer preferences) even though these vehicles like SUVs rarely, if ever, 'stray from an asphalt road (p. 31).' The F-150 continues to do well even though the regular automobiles have had difficulty in maintaining their market share. What is even more interesting is Ford's ability to leverage its market research to add value by using premium pricing strategies for a limited edition version of the F-150 called the 'King Ranch Version' using highly individuated saddle-leather seats in order to shore up its brand equity. Ford also has a tie up with Harley-Davidson motorcycles in order to cobrand the 'Harley Truck.' The marketing dimension in innovation (including the ability to harness customer preferences) should be obvious from this example. The challenge then for the Ford Motor Company is to replicate these forms of success and learnings about customer preferences in order to continually innovate in the motorcar segment as well.

But, what is the procedure for pragmatic innovation? Peter Drucker and other theorists of innovation have argued that innovation requires 'discipline.' In addition to discipline there must be an underlying philosophy of innovation as well in order to help the innovator take timely decisions in product design. The authors advocate Herbert Simon's concept of 'satisficing' (as opposed to the onerous task of seeking optimal solutions) in order to innovate in a timely fashion. 'A challenge for satisficing in innovation, then, is to define the criteria for success (p. 58).' The procedural modalities that the authors set out in this book then are 'akin to the philosophy of Herbert Simon (p. 58).' In other words, innovation must begin with a process, but must also add the intelligence and/or creativity of the innovator to reach the final product.

For example, if someone wanted to innovate in architecture, it would not be enough to merely assemble tools like CAD, 3D drawings, etc. It is also necessary to leverage the skills that only an architect possesses. There is always a risk factor and no guarantee of success. So when Frank Gehry designs a building, it is a highly individuated blueprint without any 'repetition or standardization'. It is a major challenge to those who will actually put it up, though it is these pieces of design software that make it possible for 'each piece of material on the outside of the building to be individualized manufactured and labeled for assembly (p. 64).' This innovation (as a combination of what the architect can design albeit with the help of sophisticated tools) is what enables differentiation in architecture or any other endeavor. But differentiation *per se* cannot guarantee success; it is therefore necessary to innovate as a part of a larger cycle of design and/or product possibilities rather than aim at something as one-off, and this requires high levels of intrinsic motivation in the innovator(s).

If innovation is to be driven by the customer rather than the product in mind, it becomes important to 'read trends' and leverage via 'anticipatory design' to harness the possibilities of the future. It is possible to analyze trends systematically by looking closely at the 'Social, Economic, and Technological' (SET) dimensions of the market in order to identify 'product opportunity gaps (p. 73).' These dimensions are of course dynamic and not static, so the identification of a trend is a continual process and 'the best companies read these factors in the present tense and react to changes as they occur (p. 73).'

There is also a psychological dimension to product design which the authors discuss separately without incorporating it into the SET formulation discussed above. The psychological dimension is captured through the terms 'desire' and 'fantasy.' This is because the average customer is open to a range of new experiences and is willing to pay for it. Customers prefer buying 'experiences' to buying 'products' and the task of the psychological dimension is to introduce desire in the customer by wrapping the product in fantasy.

The Harry Potter series of books for children is the classic example. No other series of adventure stories for children, in recent memory, has been able to induce such powerful desire in children for the fantastic adventures of an imaginary magician even though the work of Dr. Seuss and J R R Tolkein bear a significant resemblance to the other worldly dimensions of J K Rowling's work. The other two authors had but modest success compared to Rowling since the SET factors were not aligned well in their case. The authors cite Harry Potter as symbolic of what is possible in the realm of product innovation especially since it represents the transformational possibility of making 'the ordinary' into something 'extraordinary,' and is therefore a 'key lesson in product innovation (p. 101).' Another favorite example, of course, is Starbucks which transformed an ordinary commodity like coffee into something that is extraordinary and wrapped it in fantasy. Howard Schultz, the founder of Starbucks, is someone with a keen eye for the SET factors and was able to make a correlation between the taste for coffee and the taste for music in customers and began to integrate the entertainment possibilities of Hear Music—a retail store that eschewed easy-to-find music and specialized in hard-to-find music to generate a new business model for a coffeehouse, where customers' selection of hard-to-find music is burned into a CD to take away while they sip coffee. The Hear Music Coffeehouses have been successful because they bring together the customers' need for both 'form and function' in order to fulfill a fantasy.

It is however not enough to innovate only from the customer's point of view since there are other relevant stakeholders as well. The authors recommend a style of stakeholder analysis titled the 'Powers of 10' in order to identify the relevant stakeholders. This model of stakeholder analysis is borrowed from a film made by IBM for internal screening to its employees to 'highlight the possibilities of metric scaling (p. 112)'. This film demonstrates in approximately 9 minutes what it means to move from a micro to a macro image by 'increasing the view of the scene by an order of magnitude (p. 112).' This film exercise is an attempt to provide a sense of perspective and helps us to conduct a stakeholder analysis by identifying a stakeholder in each of the loci for each order of magnitude.

The value of each of these orders, in this example, is 10 until the film attains a 'macrocosmic view of the known universe' (p. 113) and then reverts back to a microcosmic representation of the nucleus in an atom by decreasing 'the view of the scene by an order of magnitude.' The macrocosmic view of the universe is attained (in this film) at 10 raised to the power of 24 and the nucleus of the atom at 10 raised to the power of minus 16. Product development, for example, can utilize the point of view of each of these loci to run through the structure and utility of what is being developed. In other words, 'a Powers of 10 analysis helps them anticipate where their strategic advantages are and where their potential pitfalls lie (p. 113)'.

There is an interesting case that is used to illustrate such an analysis—it involves the development of an emulsified heating fuel by Lubrizol. The stakeholder analysis involved the following dimensions—the molecular structure, the blending process, the nature of the blending machines, the system operation, the role of the community, the regions and the continents involved in the user community, and the impact of the product on the global environment. Not identifying all the relevant stakeholders can either delay the development of the product or make it unlikely to be adopted as the fuel in question. Innovation then is not just of relevance to the B2C sector, but pertains to the B2B market as well. Industrial and farm products also need to be wrapped in fantasy. Otherwise they could remain unused and endanger safety standards since bad design serves as a disincentive to use the product and might violate the expectations of the consumer.

Attempts to design and/or redesign innovative products is a complex process, however, and requires making hundreds or even thousands of decisions on the structural and functional dimensions of the product. There is also a cost factor since redesign often involves a measure of 'carryover' from the old design to the new design. This requires 'integrated' design decisions by interdisciplinary teams that can help to negotiate the value differences between different teams. The authors illustrate this problem of carryover by invoking the example of whether the attempt to redesign a car should include a new pattern for the 'grille' or whether a grille should be carried over as a standard item. While there is no correct answer to this question (across contexts), differences in the arguments put forth by the engineers as opposed to the product designers gives us important insights into the role of innovation in design/redesign and the constraints imposed by cost in all these processes. All the participants in the design/redesign process however must come to terms with the fact that the process of product innovation is not as linear and systematic as they would like it to be. They must be comfortable with the 'fuzzy front end (p. 181)' and the intermittent bouts of confusion that must be navigated in the innovation process before the product falls in place.

The reward for innovative product design is of course the patent; the authors discuss the differences between different forms of intellectual property protections including the design patent, the utility patent, provisional patents, trade dress, and trade secrets. One strategy employed by companies that are savvy about the relationship between product innovation and the patenting process is to hire patent attorneys to participate early on in the innovation process and patent not merely the 'final design form,' but 'a satellite of concepts used in the development of a product form (p. 190).' Then, again, the eternal political question is the dilemma of whether innovation should be driven by those inside the organization or whether it should be left to external consultants. While neither of these strategies comes with guarantees of success, and the authors initially promised an 'organic' notion of innovation, they need to account for the success of design consultancies like IDEO (which they describe as 'the Starbucks of product design') and Product Insight. These consultancies are also interesting because in addition to deploying the usual strategies for innovating in product design, they have mastered the art of using interdisciplinary teams to do ethnographic studies of potential users in order to build in a high usability quotient into their innovative product designs.

In order to succeed through the process of product innovation in a highly competitive global economy, however, companies have to be pragmatic. They have to be willing to deploy whatever methodologies work and balance the demands of design with those of engineering and go beyond the traditional rivalries of manufacturing versus marketing. This is easier said than done given the usual tendency to territorialize processes or make a fetish of what has worked in the past even if it cannot add value in the future. Innovative companies must be willing to emulate the creative processes that are traditionally associated with Leonardo da Vinci, the archetype of the Renaissance man in Europe, who was able to synthesize creative insights by cultivating several disciplines simultaneously. However what is needed today is not just a lone Renaissance man, but a 'Renaissance team (p. 231)' since the complexity of innovation in both consumer and industrial product design requires the work of more than one engineer or designer. It is only through these integrated teams that companies can get not only a hold, but play an active role in shaping 'the design of things to come' by enabling members of these teams (who may very well be ordinary people in and of themselves) to 'create extraordinary products.' The three authors of this book no doubt constitute a Renaissance team, including areas of expertise such as design research, innovation, mechanical engineering, and marketing, in order to fulfill the reader's desire for both 'form and function' in a theory of product innovation.

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Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant

By W Chan Kim and Renee Mauborgne

Boston, Harvard Business School Press, 2005; XV+ p. 240; Rs. 1255

ISBN: 1-59139-619-0

Blue Ocean Strategy or Old Wine in New Bottle? A critique on the book *Blue Ocean Strategy* by Prof. Chan Kim and Prof. Renee Mauborgne

The concept of creating uncontested market space was already available and hence authors Prof. W Chan Kim and Prof. Renee Mauborgne haven't created any blue ocean of ideas through their book *Blue Ocean Strategy.*

Blue Ocean Strategy (BOS) by W Chan Kim and Renee Mauborgne of INSEAD, has been adorning the top 10 business best-sellers list most of the time since its publication in 2005. Many business schools have included BOS in their curriculum for the strategic management course. Many have started offering management development programs on BOS.

What is *Blue Ocean Strategy*? According to the authors, BOS is aimed "to create uncontested market space and make the competition irrelevant". Companies have long engaged in head-to-head competition for sustained, profitable growth. Kim and Mauborgne argue that in today's overcrowded industries, competing head-on results in a bloody 'red ocean' of rivals fighting over a shrinking profit pool and is unlikely to create profitable growth in future. They argue that tomorrow's winners will succeed by creating 'blue oceans' for growth.

Such strategic moves-termed "value innovation"- create leaps in value for both the firm and its buyers, unleashing new demand and rendering competition irrelevant. They suggest Four Actions Framework for creating a new value proposition consisting of 'eliminating' those factors that companies in one's industry have long competed on, taken for granted by customers; 'reducing' those products or services that have been overdesigned in the race to beat the competition, which the customer does not value; raising by eliminating the compromises one's industry forces customers to make by setting new standards well above competitors and creating through discovering entirely new sources of value for buyers thus creating new demand and strategic price shifts.

The formulation of BOS essentially involves reconstructing the market boundaries, focusing on the big picture of the strategic canvas rather than getting too involved in the operational details. The implementation part does not differ from many earlier explorations on the subject.

The authors cite how companies created uncontested market spaces and made the competition irrelevant. The examples include the introduction of small, fuel efficient cars by Japanese car makers and the unveiling of the Minivan by the beleaguered Chrysler in the auto industry, the introduction of PC servers by Compaq and the direct sales of computers to customers by Dell in the computing industry, the introduction of multiplexes and the megaplexes in the movie theatre industry .

OLD WINE IN NEW BOTTLE?

A scan of the literature on similar subjects gives an idea that there has been at least two books which dealt with similar ideas to achieve growth by not necessarily competing directly with the competition. Books like *Every Business Is A Growth Business* by Charan and Tichy and *How To Grow When Markets Don't* by Adrian Slywotzky *et al.*, discuss more or less the same concepts. While Charan and Tichy calls the new growth approach 'Strategy from Outside-in', Slywotsky *et al.*, terms it 'Demand Innovation'.

STRATEGY FROM OUTSIDE IN

According to Charan and Tichy, most corporate leaders seeking growth look at their business from the inside out. That's why they are trapped in the fight for share of a traditionally defined market. Those who build growth companies, don't worry about share. They redefine the market, they grow it- and they want all of the growth.

They follow four simple rules for the growth plan or strategy: Looking at business from outside in. Instead of contemplating, " How can I get my customers to buy more of what I sell now?", they start looking at the company from the perspective of the present and future customers. Or, they look at business from outside in; enlarge the pond you fish in. Successful growth companies' leaders think expansively. They regularly seek to enlarge or broaden the pond they fish in. The central idea may look stunningly simple-once articulated. Authors explain how Roberto Goizueta used it in transforming Coca-Cola in the early eighties. He asked almost casually as to what was the share of Coca-Cola in the average per-capita daily consumption of 64 ounces of fluids by the world's 4.4 billion people or what is Coca-Cola's market share of the stomach? Answer: Less than 2 ounces. Thus Goizueta guided them to believe that their enemy was not Pepsi but coffee, milk , tea and water. Goizueta helped Coca-Cola redefine the market to be vaster than anybody had imagined. Enlarging the pond is the antithesis of going for market share. In fact, it forces to restate it as one's share of your potential market. That's what Jack Welch told his business unit leaders at GE: Redefine the market to one in which the current share is no more than 10%; find market segments that are growing-or create them. At the aggregate, it may be a "mature" business. But any market is a sum of many segments, and each segment fulfills a need. Identifying those segments is the first step in getting out of the 'served market' trap. The most accessible and powerful segmentation targets an adjacent segment where one can sell an additional product or service. It enables one to leverage one's existing skills and resources into new business. Examples: basketball shoes from Nike, minivan from Chrysler, etc. Such growth is both profitable and sustainable. Result: Lower capital investments, higher profit margins and predictability in earnings. One can start by identifying combinations of existing and new customers one can reach, and the existing and/or new needs one can meet for those customers. Authors also cite the example of GE Power Systems which initially identified some $1.4 bn of revenue commitments for long-term service contracts and operation and maintenance in that $48 bn pond. Gradually, they redefined their playing field as $700 bn-the energy industry. Before, the pond was limited to power plant. The new pond include everything "from the wellhead to the consumer"; *Build new core competencies to capitalize on the new opportunities.* After identifying the enlarged pond, the company has to develop necessary competencies to execute the same.

GROWTH THROUGH DEMAND INNOVATION

Slywotzky *et al.* (2003), in *How To Grow When Markets Don't*, say that in future, traditional product-centered strategies alone will not be able to create the kind of growth companies desire. In the past, companies searching for growth have relied on classic product-focused strategies: innovative products, global markets, and acquisitions to gain market share and create efficiencies. While these traditional growth moves are important, they won't help in driving significant, sustained new growth. This is true because these will provide increasingly smaller returns in terms of growth. The advantages gained in this tit-for-tat combat are invariably thin. Companies will need to find new platforms for growth. Or, their stock prices will be going nowhere, while their talent goes elsewhere.

DEMAND INNOVATION

According to Slywotzky *et al.*, it has been observed that a new form of response to the challenge and growth that is being pioneered by a handful of farsighted companies. These companies are focused on creating new growth and new value by addressing the hassles and issues that surround the product rather than by improving the product itself. They have shifted their approach from product innovation to demand innovation.

Demand innovation is about creating new growth by expanding the market's boundaries. It focuses on using the product position as a starting point and to do new things for customers that solve their problems and improve their performance. They create new value and new growth, even in mature industries.

Authors observe that the new growth innovators recognize opportunities which others do not and develop profitable ways to respond. These non-conventional companies opened up greater market space and moved to a world where future growth expectations were available for long-term. They did so by using demand innovation to uncover three sources of new growth, namely creating new, more powerful opportunities, to grow core product sales by reinforcing and deepening customer relationships and shifting the basis of competition from product price and performance to differentiated and valuable dimensions to capture a larger share of the customer's spending, better pricing, and high margins; combining multiple products and services adding more value, capturing new sales from adjacent markets and creating lucrative balance between products and services and turning the improvements in the customer's value chain into new revenue streams. The best growth practitioners create growth along all three dimensions simultaneously creating high-intensity profit growth in low-margin industries. The secret to create this richer opportunity lies in viewing customer activities meticulously. This means studying customer's activities, costs, capital needs, information flows, and priorities, that one can help improve by making an important shift- from responding to customer needs to anticipating them.

Haven't Charan and Tichy and Slywotzky et al described the same idea much earlier which the authors of BOS try to propagate? Is there anything dramatically different in BOS? All talk about expanding or redefining the boundaries, which is the crux of the whole idea. All talk about adjacent segments, anticipating future needs of customers and creating new values for customers. Even examples cited are common. Hence, the authors have not been able to create a new Blue Ocean for themselves in terms of ideas. All the same, *Blue Ocean Strategy* , gives good reading and may be useful for those who have not read the other two.

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Tectonic Shift: The Geoeconomic Realignment of Globalizing Markets

By Jagdish N Sheth and Rajendra S Sisodia

Response Books, New Delhi, 2006; p. 350; Price Rs. 550

ISBN: 0-7619-3490-1

In *The Commanding Heights: The Battle Between Government and the Marketplace That is Remaking the Modern World*, (1998)' Yergin and Stanislaw described the historic forces that have prompted societies, worldwide, to reject government control and promote entrepreneurial growth through private initiative. 'Tectonic Shift' by Jagdish Sheth and Rajendra Sisodia is a continuation of this historic journey with a promise to offer "a plausible scenario for how the global economy is likely to evolve in the first few decades of the 21st century".

The book focuses on the future of different nations taking into consideration their economic, political, social and demographic condition. Authors use case studies from Europe, America, Japan, South Korea, Africa, Australia, India and other regions to portray the challenges faced from a historical perspective. Taking a futuristic view, they also attempt to put forth the threats of tomorrow, especially for today's developed nations (US, Western Europe and Japan).

The beginning chapters explain in detail the 'magic of Ricardo', i.e., phenomenal relevance of Ricardo's 'theory of comparative advantage' in the world's emerging patterns, showing how free trade can prove to be beneficial in future. Later, the focus shifts to what each trade bloc, and what the nations within such blocs, must do to make themselves globally competitive.

The book discusses the emergence of market forces in the final decade of 20th century due to failure of governments in providing growth and prosperity. It takes us through the journey of British colonial days and subsequent failure of socialist/ communist (Marxist) and mixed economies (Keynesian) in most parts of the world. Economic forces led political changes that took place in developed and developing nations alike. This transition of societies from ideology to economic forces led welfare has also been emphasized by discussing several cases. Such changes resulted in subsequent emergence of new forces like Mexico and China in different parts of the world.

To understand evolution of the world economy better, Sheth and Sisodia have divided the world's developmental process into three eras: Western Europe led era (1800s), United States led era (1900s) and large emerging nations led era (21st century). It is the 3rd time period and the forces emerging in that era which, according to the authors, is going to change the economic balance of the globe and realign power among the three regions. The reason for this change of pattern in the third time period, as authors suggest, is slowing growth and saturation of opportunities in developed countries on the one hand, and untapped potential of human and natural resources in the large developing nations on the other, offering the latter opportunities based on competitive advantage.

Naturally, in such a situation, an alliance between developed and developing nations would provide a win-win situation to both along many dimensions. The developed nations can gain by having access to a larger markets, which can result in scale advantages and global competitiveness. It can also solve their problems related to natural and human resources for lower value activities, as they can be taken care of by developing nations. The developed nations can thus concentrate on higher value high-end activities. For developing nations this kind of alliance can offer them capital, technology and overall opportunity to industrialize and cater to a larger market based on their resource-driven competitive advantages.

The authors see three regional world blocs emerging through past, present and future alliances. NAFTA will expand to include North, Central and South America, Caribbean and Cuba. US will lead it. European Union will expand to include Eastern Europe and Russia, and will be led by Germany, France and Russia (in that order). And finally, an alliance of almost all Asian nations (except for some countries in south Asia), Australia and New Zealand, which will be led by China, Japan and South Korea (in that order). Some exceptions in this essentially regional integration will be nations like India and Britain. Britain will join US led alliance due to, in part, its historical alliance and orientation as well as dominance of Germany and France in EU bloc.

Listing the essentials for economic integration within a bloc and between the blocs, the focus is on 'flows' on six fronts, which will essentially be guided by market forces, and will need to be complimented by strategically planned policies and initiatives by the governments. In this regard, the view is that countries will be managed as 'national corporations', which in turn will be woven into the fabric of a bloc economy…through a network of nations". The authors suggest that realignment of policy initiative should be guided by five dimensions of: Ideology-free policy, privatization of public enterprises, incentive for quality innovation and productivity, stimulating economic growth, and environmental compliance.

The authors predict and suggest that to have an efficient free trading environment, currencies will also need to be realigned and each trade bloc will eventually be having a common currency. This will remove trade barriers, currently brought about by currency fluctuations and conversion issues.

To achieve all these rationalizations, the US bloc, in particular, will have to think regionally and act quickly through massive disinvestments and then reinvestments, as it is notably lagging behind the European bloc on this front. Some major problems in this direction are huge farm subsidies in US, tariff cuts issues, anti dumping issues, etc. Apart from these, Brazil's insistence on maintaining 'MERCOSUR' which US wants to subsume in FTTA and other related differences also need to be resolved.

The other major hurdles in achieving a three bloc trading world are the questions regarding who will lead in each bloc, how the political consensus will be struck, and how fulfillment of rising expectations from free trade can be achieved. Though the answers to the first two questions lie in the evolving pattern of the future itself, it is the third question, and concerns relating to that, which is the beginning and end of the whole story, and poses the most difficult challenge before nations and the world alike.

The authors predict that by 2025 this process would be completed and almost all the nations will be loosely or tightly aligned with one of the three blocs. They predict that in the final shape these blocs within themselves will be north-south aligned (with some exceptions as India going with US alliance), rather than the current pattern of east-west alliance and trade. These blocs will serve as the internal markets within themselves for all the partners in the blocs. On a global scale, led by their respective leaders, these three blocs will fight for the world market. As opposed to the colonial mindset of takeover and dominance, in the new architecture, growth will come from a partnering approach with emerging markets, in particular with large developing countries.

Due to this tri-polar structure, the world will be having a dynamic balancing equation in which two blocs can come together if the third bloc is posing a real challenge of becoming dominant. And further, due to such power balance, coupled with economic opportunity and welfare to all the nations in trade blocs (extension of Ricardo's argument), the three bloc model should remain stable and sustainable, at least for some time in future to come.

Overall, Ricardo's model of free trading world is the principal guiding philosophy for most arguments of this visionary book. The authors seem to suggest that free trade will become more and more relevant as the world evolves as a global trading platform. But interestingly, the book does not talk about free trade in an absolute sense and for some unknown reasons, restricts the extension of their argued model to a tri-polar trading world.

Even achievement of this tri-polar planet seems to have been done mostly from the point of view of developed nations (read US), as most of the concerns of the developing nations (and that of some developed nations like Canada also) have not been given adequate thought. One can insist, though, that this book is not about solution of integration problems and concerns. Even then, it could probably have given some more thought to voices of Brazil, India, and other developing nations on issues like farm subsidy, inter-boarder passage of people, financing pattern of US budget, and stability of the Dollar, among others.

One more point of debate could be the suggestive remarks made in this book about nations like Nepal, writing them off by saying that they will not be able to get anything out of these changes because of their inherent lack of potential, thereby completely ignoring its vast tourism and other potentials.

Despite above objections, most of which are topics of debate, there is no doubt about the fact that 'Tectonic Shift' gives a remarkable view of the future and can serve as a guiding vision for policy makers and nations to integrate and find their niche in an evolving tri-polar world. It not only appears to solves the saturated growth problem of developed nations but also offers a partnering opportunity for the developing world to grow and gain by exploiting their untapped inherent potentials with the help of developed countries.

As the authors opine, the most exciting aspect of this realignment of economic forces is the fact that, it offers an opportunity to increase the standard of living and overall welfare of the whole world, without making anyone worse off. That's the sign of true growth and development.

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(Published Quarterly)

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