COUNSELING NEEDS: THE INFLUENCE OF PERSONAL CORRELATES AMONG TECHNICAL AND NON TECHNICAL EMPLOYEES

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Understanding various kinds of problems in work situations would help the organizations to provide better counseling services, and create healthy environment for improving the performance. The counseling needs are perceived due to various kinds of problems exist in work situation. The present study examines the nature of counseling needs present among 286 technical and 144 non-technical employees working in different organizations, and find out the influence of personal correlates (age and experience) on these counseling needs. The counseling needs are categorized into work, personal, group, health, and economic and psychological types. The results indicate a significant amount of work needs observed among the technical, and whereas family needs are found in non-technical employees. The implications of the findings for minimizing the counseling needs in different aged, and experienced groups of technical and non-technical employees are suggested.

Key words: Counseling Needs, Problems at work, Technical and Non technical employees

Post-industrial societies are going through a period of various transformations in the workplace. A profound sense of insecurity, uncertainty, threat, and loss of control was reported along with a range of negative emotions such as rejection, disappointment, and anger in many employees (Burlew, Pederson, & Bradley,1994).Many of the work problems have been identified not only within a vocational context, but they interplay with social and personal aspects that cause severe physical, emotional, or social pressures (Chen,2001). Psychological (Mynors-Wallis, Gath, Day & Baker 2000.), personal, family (Rodriguez, & Borgen, 1998), alcohol dependency, and financial problems causes to lower the quality of work in some employees (Novarra.1986).Negative attitudes and destructive behaviors, such as low organizational commitment, distrust in management, job dissatisfaction, absenteeism, stress, aggressive behavior, retaliation, theft and turnover have also

been experienced(Carroll,1996).Some organizations incurred huge losses because of absenteeism and depression of the workers (Greenberg, Ronald , Howard , Stephanie , Sarah , Patricia , Berglund, & Patricia , 2000).

Psychological principles play an important role in improving the quality of work life and organizational effectiveness (Cummings & Worley, 2005; Landy & Conte, 2005; Riggio, 2003). The problems of Pain and distress usually takes the person being depressed, demoralized, feeling of hopeless, anxiety, fear, and worry(Mirowsky and Ross,1990). Variations in control and socio emotional support at work predict the variations in psychological depression (Karasek & Theorell, 1990). Employees who are preoccupied with serious personal problem often find difficult to focus on their work. In some organizations, problems of shift workers were met by counseling, and employee treatment given by the employer (Monk,1997). However, the effectiveness of employee counseling also depends on the nature of social, psychological problems and the kind of employer- employee relations present in that organization (Berg, 1970).

The organization is a system has its own life which is conscious and unconscious subsystems relating to and mirroring one another (Coleman & Bexton, 1975; Czander, 1993; Hirschhorn, 1993; Miller, 1993; Obholzer & Roberts, 1994) The worker who is a part of micro system is likely to have unfulfilled and unconscious family and work related problems in the work situation. The nature of one's work often imposes a schedule and structure on one's life, establishes patterns of social interaction, dictates economic status and well-being, provides with a means of judging one's status and personal worth, and consequently, it becomes a major determinant of adjustment and quality of life (Donaldson, Gooler, & Weiss, 1998).

By using effective psychological interventions for the problems experienced, one would be having profound long lasting positive effects on the individual and the system. It requires having an understanding about the nature of problems experienced. With the presence of varied work related problems, it is inevitable long term costs are profound and expensive: human suffering, unnecessary or inappropriate system utilization, lost productivity at work, family problems and other consequent costs need to born by individuals, families and society. Identifying the nature of problems proved, to be a very significant step in the right direction to

create industrial harmony and healthy organizational culture (Pradeep,1997). Recognition of early signs for any problem would not only help to the employees but also to the organizations by avoiding to lead any dysfunctional consequences. A need-based approach would help to establish effective communication and thereby improve performance in the workplace. Work is a primary source of stress for many individuals, some research shows that the nature of job is unique to the experiences of some employees, and may contribute to their physical and mental health challenges in terms of experiencing different problems or otherwise counseling needs (Shumway, Wampler, & Arredondo, 2003). The counseling needs at work experienced by employees have found to be a function of environment. In organizations, counseling needs are experienced through the nature of job, and show their effectiveness through role alignment. Those are not having any problems in work situation feel more sense of responsibility for a shared mission and belief in mutual values. Nature of job has an influence and individuals may differ in job characteristics like autonomy, skill variety, task identify and practicality which in turn effect them to have less problems in the their work.

The age and experience of the employees can also influence their competencies. Surveys have revealed that no attempts have been made to examine the influence of personal factors on counseling needs and also employees working in different work environments would differ on their background and knowledge. Thus, the present study attempts to 1) examine the influence of work (technical and non technical) on the dimensions of counseling needs and 2) find out the influence of personal correlates (age, and experience) on the dimensions of counseling needs.

METHOD

Sample

The sample in the present study was drawn from the employees working in different organizations situated in Visakhapatnam, Andhra Pradesh. 286 technical employees working in production departments and 144 Non technical employees working in administrative sections were included in the sample.

Measures

The counseling needs measure was developed by the author. The most common and frequently observed problems generally found in organizational settings were included as items, which were identified by earlier researchers (Carol &Walton 1997; Noven. T, 1998).The measure consists of ninety problems and they were theoretically categorized into Work, Person, Group, Health, Family, Psychological and Economic counseling needs. The respondents were requested to indicate the frequency in which they exhibit the problems mentioned in each counseling need. A three-point response category was used in which high score indicates more extent of the problem experienced. The sum of the scores of each problem present in each dimensions of counseling need indicates the score of that particular need, where high score indicates more of that need. The psychometric properties of this measure supported to use this scale, where the internal consistency relaibilities were estimated and obtained the values ranging from .684 to .774 for all the dimensions of counselling needs.

Personal factors

The information regarding the age, and experience of the employees was collected by using various response categories provided in the schedule.

The data were analyzed by computing the significance of difference in between the technical and non-technical group mean scores on the dimensions of counseling needs. Further, the significance of difference among the employees of different age, and experienced groups on counseling needs were also analyzed. The higher mean in each counseling need indicates more of that need experienced by the group.

RESULTS & DISCUSSION

The results indicate the significance of difference on the dimensions of counseling needs in between the technical and non-technical groups. Also the results indicate the influence of age, and experience on counseling needs among technical and non-technical groups. The individual problem in each dimensions of counseling need responsible for its contribution was identified. Higher the mean score (more than =1.5) of that particular individual problem in each need indicates more responsible in contributing to that particular counseling need.

Table No -1: Significance of difference between technical and non technical employees on counseling Needs

Counseling Needs	Technical employee group (N = 286)		Non-technical employee group (N =144)		t =Value
	Mean	S.D	Mean	S.D	
Work	21.241	3.702	20.368	3.429	2.365*
Personal	23.482	4.339	23.069	4.785	.900
Group	14.101	3.045	14.229	3.166	-.405
Health	24.479	3.961	24.493	5.077	-.031
Family	12.713	2.985	13.375	3.486	-2.048*
Psychological	29.115	5.382	28.538	6.887	.951
Economic	13.734	3.605	13.479	4.186	.655

*P<.05

I) Nature of work and Counseling needs

The influence of work (technical and non technical) on counseling needs can be observed by comparing the technical and non-technical groups (see table No 1).The significance of difference was observed on the dimensions of work (t=2.365,p<0.05) and family(t=-2.048, p<0.05) counseling needs in between these groups, where more work counseling need experienced by the technical employees, and family counseling need experienced by non-technical employees.

Work counseling need in technical group is mainly due to having the problems of repetitive work (mean =2.06), which is significantly contributing to the difference in between the technical and non technical employee groups. Besides too much responsibility in the work (mean=2.06), inadequate resources (mean=1.91), inadequate authority (mean=1.91),strenuous work(mean=1.85) and uncertain working conditions(mean=1.77)contributing to more work related counseling need. However the Family related counseling need in non-technical employees are mainly due to looking after the old parents (mean =1.72), family problems (mean=1.65) and feeling of not having own house (mean= 1.58)

The more work related counseling need present in technical employees is more likely with their nature of work involves with more complexity and technical in nature. These employees need to pay more attention towards their work being carried in each stage of the work involved with varied process. Sometimes the

monotonous and strenuous work leads to experience severe stress and anxiety, which results to cause more work related problems. Family counseling need in non-technical employees is more likely due to economic reasons, and where they tend to get less salary because of their work involved with less complexity and technicality, when compare to the technical personnel. With the kind of difference in their nature of work, and with the less salary, the non technical employees may find difficult to meet the demands like medical and other family expenses.

II) Personal correlates and Counseling Needs

a) Age :

Table 2 indicates significant difference among different age groups of technical and non-technical employees on counseling needs. Further, it is observed that there are differences between the two groups (technical and non technical) in the nature and extent of influence of age on counseling needs.

Table No. 2 : Significance difference on counseling needs among different age groups of technical and non technical employees

Counseling Needs	Age Groups	Sample Size	Mean	S.D	F=Value
Work	< 30yrs	94	21.957	4.037	3.127*
		34	**21.029**	**2.887**	**1.901**
	30-40 yrs	105	20.657	3.777	
		38	**20.816**	**3.295**	
	>40yrs	87	21.172	3.092	
		72	**19.819**	**3.678**	
Personal	< 30yrs	94	24.649	4.719	5.209**
		34	**23.676**	**4.147**	**.418**
	30-40 yrs	105	22.895	4.021	
		38	**23.105**	**5.574**	
	> 40yrs	87	22.931	4.069	
		72	**22.764**	**4.656**	
Group	< 30yrs	94	14.415	3.384	.890
		34	**14.118**	**2.761**	**.027**
	30-40 yrs	105	14.057	3.082	
		38	**14.263**	**3.584**	

	> 40yrs	87	13.816	2.586	
		72	**14.264**	**3.153**	
Health	< 30yrs	94	24.777	4.273	1.365
		34	**24.235**	**4.850**	**.060**
	30-40 yrs	105	23.971	3.740	
		38	**24.632**	**5.273**	
	> 40yrs	87	24.770	3.854	
		72	**24.542**	**5.143**	
Family	< 30yrs	94	12.766	3.164	.483
		34	**13.471**	**3.994**	**1.503**
	30-40 yrs	105	12.876	2.983	
		38	**14.132**	**3.714**	
	> 40yrs	87	12.460	2.803	
		72	**12.931**	**3.060**	
Psychological	< 30yrs	94	29.745	5.561	.996
		34	**29.824**	**6.847**	**1.083**
	30-40 yrs	105	28.905	5.420	
		38	**28.842**	**6.728**	
	> 40yrs	86	28.686	5.134	
		71	**27.761**	**6.981**	
Economic	< 30yrs	94	14.936	3.781	10.067**
		34	**14.824**	**4.086**	**3.991****
	30-40 yrs	105	13.581	3.353	
		38	**14.026**	**4.414**	
	> 40yrs	87	12.621	3.342	
		72	**12.556**	**3.936**	

* P<0.05, ** P<0.01   Note: The values for Non technical group are in bold face

Technical employees - With regard to the age and counseling needs of technical employees, It is noted from the table No 2 that the counseling needs are significantly differed among different age groups, where the younger technical employees experience more work(F=3.127 p<0.01), personal(F=5.209 ,p<0.01) and economic (F=10.067,p<0.01) counseling needs when compare to other age groups of 30-40yrs and more than 40yrs. Work related counseling needs in younger technical employees are mainly due to inadequate resources (mean=2.06), strenuous work (mean=2.03), too much responsibility(mean= 2.19), inadequate authority (mean=2.03) inadequate infrastructure (mean=2.01). When it comes to personal counseling need, it is mainly because of doing unnecessary things, lack of appreciation for the work done (mean=2.05), heavy work load (mean= 2.13), less career progression (mean= 2.16). However the economic counseling need in these employees is mainly because of insufficient salaries (mean=2.44), and not having enough savings (mean= 2.03).

The work related counseling need present among younger technical employees are likely due to heavy and strenuous work usually carried at lower level technical jobs involved with difficult and complex operations. The younger employees, who are generally enter at lower levels in their career may not able to adjust and cope with the work, resulting to cause some work related problems. Also the employees, who receive low salaries at the entry level, feel that their salaries may not be sufficient to meet their personal demands as per their expectations.

Non-technical employees - The table No–2 provides that only economic need (F=3.991, p<0.01) is significantly differed among the groups of non-technical employees. It is observed that younger employees are reported to experience more economic counseling need when compare to other age groups of non-technical employees. More economic need in younger non-technical employees is more likely due to not having enough savings (Mean=2.01). The younger non-technical employees who work in lower positions may not get equivalent salaries on par with technical employees. The technical employees by virtue of their job, which carries with skilled work, tend to get more salary. These technical employees could make some savings after meeting their family needs, whereas non-technical employees may not save much as technical employees because of getting less remuneration.

b) Experience

Technical employees- The significance of difference on employees counseling needs among different experienced groups indicates that all the counseling needs are significantly differed (see table No.3). It is observed that the less experienced employees have more counseling needs with regard to work(F=8.175,p<0.01), personal (F=10.698,p<0.01), group (F=3.880,p<0.05), psychological (F=8.571,p<0.01),health(F=3.222,p<0.05) and economic (F= 13.363,p<0.01). The more counseling needs with regard to work in the less experienced employees may be due to having too much responsibility (mean=2.33),inadequate resources(mean=2.14), strenuous work(mean =2.12), inadequate infrastructure(mean =2.12), and inadequate authority(mean= 2.02). The personal counseling need in these employees is more likely due to the feeling of having heavy workload (mean=2.16), lack of appreciation (mean=2.12) and lack of career

progression (mean=2.12). However, Group related counseling need is mainly due to their inability to exert enough power to control others (mean= 2.01). The health need is mainly due to muscular pains (mean= 2.02), psychological need is due to tensions (mean= 2.04), the economic need is because of insufficient salaries (mean=2.48), and not having enough savings (mean= 2.04).

The more work, personal, group, family health, psychological and economic counseling needs present in less experienced technical employees is probably due to their inability to adopt the work situation because of lack of clarity and not having enough technical expertise to carry the work. Moreover, they may not find support from their superior or management especially at an early stage of their career, possibility of uncertainty and confusion would be resulted to cause the problems especially with work, personal, group, health and psychological perspectives. Moreover, less experienced technical employees may not show good performance in their work, because of lack expertise and knowledge, which would show some impact on their income. Whereas more experienced employees being with adequate knowledge and expertise able to cope with any difficult work situations, which leads to have fewer problems.

Table No 3 : Significance difference on counseling needs among different experienced technical and non technical employees

Counseling Needs	Experienced Groups	Sample Size	Mean	S.D	F=Value
Work	< 5yrs	58	22.862	4.236	8.175**
		31	**21.000**	**3.044**	**1.134**
	5- 10 yrs	98	20.469	3.644	
		35	**20.657**	**3.253**	
	>10yrs	130	21.100	3.272	
		78	**19.987**	**3.634**	
Personal	< 5yrs	58	25.758	4.918	10.698**
		31	**23.065**	**4.381**	**.000**
	5- 10 yrs	98	22.949	4.255	
		35	**23.057**	**5.567**	
	>10yrs	130	22.869	3.791	
		78	**23.077**	**4.623**	
Group	< 5yrs	58	15.086	3.643	3.880*
		31	**14.774**	**3.084**	**.742**

		N	Mean	SD	F
	5- 10 yrs	98	13.857	3.039	
		35	**13.829**	**3.374**	
	>10yrs	130	13.846	2.671	
		78	**14.192**	**3.113**	
Health	< 5yrs	58	25.448	4.365	3.222*
		31	**23.645**	**4.594**	**.925**
	5- 10 yrs	98	23.806	3.817	
		35	**25.343**	**6.044**	
	>10yrs	130	24.553	3.811	
		78	**24.449**	**4.785**	
Family	< 5yrs	58	13.293	3.356	1.618
		31	**12.839**	**3.787**	**.741**
	5- 10 yrs	98	12.408	2.787	
		35	**13.886**	**3.684**	
	>10yrs	130	12.684	2.941	
		78	**13.359**	**3.279**	
Psychological	< 5yrs	58	31.500	5.423	8.571**
		31	**29.968**	**6.755**	**2.771***
	5- 10 yrs	98	27.928	4.976	
		35	**30.000**	**8.228**	
	>10yrs	129	28.945	5.360	
		78	**27.299**	**6.079**	
Economic	< 5yrs	58	15.500	4.172	13.363**
		31	**14.548**	**4.478**	**3.129***
	5- 10 yrs	98	14.020	3.025	
		35	**14.286**	**4.818**	
	>10yrs	130	12.730	3.416	
		78	**12.692**	**3.619**	

* P<0.05, ** P<0.01   **Note:** The values for Non technical group are in bold face

Non-technical employees -With regard to the significance of difference among different experienced non technical employees on employee counseling needs. It is observed that there is a difference on psychological and economic needs, whereas less experienced non technical employees experience more than other two groups. The psychological counseling need in these employees is mainly due to having tiredness (mean= 2.01) and increased fatigue (mean=2.12), where as the economic need is more due to insufficient salaries (mean=2.16). Non technical, less experienced employees some times feel tired because of their work which is in continuous and monotonous and do not have any skill variety. It requires using with proper planning. It was supported with the evidence that counseling needs can be understood better, when its management practices and cognitive context taken into account (Lane, D. A, 1993). Large percentages of employees were exhibiting poor financial behaviors and interested to have workplace financial counseling (Joo, So-

Hyun; Grable, John E. 2000). Identifying the sources of workplace stress, organizations can appropriately intervene through counseling, so that individuals with problems either related or unrelated to the workplace can get help and support in resolving them (Cooper, & Cartwright, 1994)

CONCLUSION

The findings suggest that it is beneficial to the employees as well as to the organization. Understanding the nature of employee counseling needs could be useful in many aspects especially in terms of providing counseling to the particular group of employees referring to the nature of work being carried.

The present study indicates that counseling needs can be a function of nature of work carried by the employees. The nature of duties which involves with more complexity and technical are likely to induce more work related problems in technical employees. The family counseling need in non-technical employees is being the function of economic reason, where low monetary benefits could induce them to have more family problems. The impact of personal correlates (age, and experience) on counseling needs experienced by technical and non-technical employees indicates younger and less experienced technical employees are experiencing more counseling needs.

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Assessing Service Quality In Indian Management Institutions: An Alternative View

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The mushrooming of management institutions in India along with systematic liberalization of higher education sector means increasing competition for institutions. Students have ample choices and are less price-sensitive and more quality conscious than ever before. Quality of an institution, as perceived by its stakeholders, thus becomes important for institutions. Different agencies worldwide are rating and ranking institutions. However, there are debates about the wide disparities between, and correctness of parameters and measurement scales used. This article is based on an empirical study conducted to identify the key quality parameters and to develop a survey instrument to assess stakeholders' perception of quality of an institution. Twenty-four parameters were identified and were grouped under five major quality dimensions – both academic and non-academic. A questionnaire was developed with these parameters. Hypotheses were tested to find the relative importance of these dimensions, as perceived by students and faculty, and the correlations among them.

The increasing competition and stakeholders' power witnessed in the area of management education in India today are compelling the educational administrators to find out ways to survive and prosper in the rapidly changing environment**.** Quality is a key determining factor for attracting students and remaining competitive because it is found that price sensitivity is decreasing and quality consciousness increasing among direct and indirect customers of the institutions. The quality of an institution, as perceived by its stakeholders, becomes important in this context (Bandyopadhyaya and Pani, 2005).

Different agencies worldwide rate and rank management institutions mainly for giving an idea of the expected quality level of institutions to the prospective students, recruiters and the schools themselves. However, there are debates about the wide disparities between

and the correctness of parameters and measurement scales used for ratings (Vedpuriswar, 2003).

There are several studies that give basic overview of quality in educational institutions (Kwan, 1996; Finch, Helms and Ettkin, 1997). Others discuss the application of quality management principles to education (Brigham, 1993; Bailey and Bennet, 1996; Burkhalter, 1996; Dahlgaard, Kristensen and Kanji, 1995; Owlia and Aspinwall, 1998; Lachlan and Crawford, 1999; Mergen, Grant and Widrick, 2000; Vazzana, Elfrink and Bachmann, 2000) and still others the practical experiences in implementing quality principles (Fiegenbaum, 1994; Rudolph and Howard, 1996). There are few studies on quality of management education in India (Sahney, 2003; Sahney, Banwet and Karunes, 2004a); and how students judge the education system they experience (Sahney, Banwet and Karunes, 2004b).

However, there is no specific survey instrument to measure service quality level of a management institution. The wordings of SERVQUAL (Parasuraman et al., 1985), the well-accepted generic service quality measuring instrument, have been modified, keeping the original 22-item battery intact and used for the purpose (Cuthbert, 1996b). Literature review showed various conceptual criticisms (explained by Buttle, 1996) of the five dimensions of SERVQUAL, and it has been argued that they might not be the appropriate dimensions for measuring service quality in higher education.

This paper is based on an empirical study conducted to find out the key quality dimensions important for management institutions in India; and to develop a survey instrument (questionnaire) to assess the service quality of institutions. The questionnaire was developed in three stages. It uses the three column format of SERVQUAL scale but with 24 new parameters grouped under 5 broad dimensions.

Data collected with this new instrument that is proposed as an alternative scale (alternative to the generic SERVQUAL) to assess service quality of management institutions showed that it had excellent reliability and also the dimensions were more

discerning than the SERVQUAL dimensions. Hypotheses were tested to find if there is any difference in the importance attached by the students to the five quality dimensions; if they attach similar importance to academic and non-academic dimensions; and if there is any difference in the perceptions of students and faculty members regarding these dimensions.

THE PILOT STUDY

Focus group discussions identified 51 parameters that could be grouped under 11 broad dimensions. These parameters were used to develop a questionnaire for pilot study. This questionnaire suffered from two main drawbacks. First, the reliability (scale α) of the instrument was 0.7511 which is just in acceptable range. For social research α > 0.7 is considered acceptable while α > 0.8 is good. (George and Mallery, 2006). Second, with a questionnaire having fifty-one items, chances of getting response from people are low. So it was necessary to develop a more reliable scale to ensure that its set of items is a better measure of the underlying construct. The scale required less number of items to ensure easy feedback and improved response rate. (Bandyopadhyaya and Pani, 2006).

APPLICABILITY OF A STANDARD INSTRUMENT

To improve the pilot study questionnaire, initially Factor Analysis was tried, to identify a small number of factors that may be used to represent relationships among sets of interrelated variables. However, since correlations between the items were low, quantitative reduction of the number of items using Factor Analysis was not possible. Also since majority of pilot study respondents gave high to moderate importance to all the items, elimination of any item directly was not possible (Bandyopadhyaya and Pani, 2006).

It was then decided to choose one among the available standard instruments for measuring service quality and suitably modify it to make it applicable to Indian management institutions.

Since the aim was essentially to model the determinants of quality, a holistic viewpoint was needed rather than just the teaching learning experience. For this purpose a modified

SERVQUAL scale seemed suitable. Literature review showed that SERVQUAL incorporates all aspects of quality of a service organization that adds up to a total experience for the consumers of the service and leads to their satisfaction or dissatisfaction. Some researchers have used the instrument in management institutions [Rigotti and Pitt (1992), McElwee and Redman (1993), Cuthbert (1996a & b)].

The questionnaire used at this stage had the same items and their sequence as the modified SERVQUAL used by Cuthbert (1996a,b) in assessing quality of Manchester Metropolitan University – Department of Business and Management Studies. However, while Cuthbert used a two-part questionnaire based on the early work of Parasuraman et al. (1985) that relied upon a single expectation standard, the present study uses an alternative three-column scale suggested by Parasuraman et al. (1994). They found the three-column format superior to the one- and two-column formats in many ways. Here a two-level expectation standard is defined viz. minimum or adequate level and desired level. Service performance may be assessed by separately comparing perceived performance with the two expected levels. The gap between the two expected levels gives a measure of the Zone of Tolerance (ZT). The gap between the perceived performance and minimum expectation level gives a Measure of Service Adequacy (MSA) while the gap between the perceived performance and desired expectation level gives a Measure of Service Superiority (MSS). The sentences used by Cuthbert (1996a, b) have been suitably modified to make them applicable for the three-column format.

Data analysis using this instrument showed that although modified SERVQUAL is highly reliable, there is hardly any difference between the five dimensions of the scale. Literature review also showed various conceptual criticisms (explained by Buttle, 1996) of the five dimensions of SERVQUAL, and it has been argued that they might not be the appropriate dimensions for measuring service quality in higher educational institutions. Carman (1990) argued that the SERVQUAL instrument provides a basic skeleton for use across a broad spectrum of services and the wording and subject of some individual items

need to be customized to every service setting. Even Cuthbert (1996b), who found SERVQUAL the most practical model available in literature to measure service quality, said that the instrument might not be of much use in quality assurance unless its dimensions are easy to grasp by the average user.

This showed that there was scope of improvement in this questionnaire also; with modified dimensions that are easier to relate and more specific to the quality of management institutions (Bandyopadhyaya et al, 2008).

Developing An Alternative Survey Instrument

Since the five dimensions of SERVQUAL were not found very appropriate for measuring service quality in higher education, it was decided to identify the quality dimensions relevant for management institutions and easily understood by stakeholders. The dimensions identified from pilot study were found easy to understand but had obvious redundancies and so it was decided to try improving that instrument. As quantitative factor reduction of the pilot study questionnaire was not possible, it was decided to adopt the Delphi technique to improve the questionnaire. Since the three-column format of SERVQUAL was found to have excellent reliability, it was decided to retain that scale.

Delphi technique is used to elicit information and judgments from participants to facilitate problem-solving, planning, and decision-making. It does so without physically assembling the contributors. Information is exchanged via mail, FAX, or email. This technique is designed to take advantage of participants' creativity as well as the facilitating effects of group involvement and interaction. It requires a coordinator to organize requests for information, receive information, and to be responsible for communication with the participants. Delphi has been widely used in business (Dunham, 1996).

The purpose of using Delphi technique in this survey was to find if some obvious groups could be formed with the items and some duplicating or irrelevant items eliminated. Opinions were solicited via email with a panel of seven independent experts. The

researcher sought their views about the 51-item pilot study questionnaire in three stages and finally decided on 24 items grouped under five dimensions as shown in Table – 1.

Table – 1: Quality Parameters In The Alternative Questionnaire

Quality Dimensions	Item No.	Item Description	Sl. No. Of Item In Final Questionnaire
1. Intellectual Property	1	Full time assignment of faculty members	1
	2	Industry or corporate experience of faculty	6
	3	Academic qualification of faculty	11
	4	Consultancy, research and publications by faculty	16
	5	Publishing journals and books by institute	21
2. Selection Procedure	6	Prior industry experience of students	2
	7	Standardized written examination, group discussion and personal interview for student admission	7
	8	Psychometric tests for student admission	12
3. Support mechanisms	9	Attractive buildings; luxurious guesthouse and well-equipped classrooms	17
	10	Adequate and competent support staff	22
	11	Latest reference books, journals (including on-line journals), business magazines and research papers in the library	3
	12	Latest information & communication technologies and 24 hour Internet facilities	8
	13	Visionary leadership, well-defined mission and a distinct logo of institution	13
	14	Placement of all graduating students by the institution	18
	15	Quality of placement provided	23
4. Networking	16	Networking with industry and promoting institution's achievements	4
	17	Alumni endowments for research and institute development	9

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	18	Collaborating with other Indian or foreign institutions and promoting student and faculty exchange programmes	14
	19	Arranging regular talks by eminent industrialists &/or CEOs; conducting business quizzes, seminars and conventions	19
	20	Social work and tie-up of institution with NGOs & involving students in social work	24
5. Course curriculum	21	Offering & designing courses designed as per current industry requirements with project work as an important element of all courses	5
	22	Regular industry visits & need-based on- job training for students	10
	23	Case studies in all courses	15
	24	Standardized courses benchmarked against those of the best institutions in the world	20

The proposed questionnaire has the above 24 items in the serial order mentioned in the above table and uses the three-column SERVQUAL format. An example showing the format of this questionnaire is shown in Table – 2 below.

Table – 2: Format Of Alternative Questionnaire

Kindly give your impressions about your own institution's service performance relative to your expectations. Please think about the two levels of expectations defined below:
MINIMUM SERVICE LEVEL – the minimum level of service performance you consider acceptable
DESIRED SERVICE LEVEL – the level of service performance you desire
For each of the following statements, please indicate: (a) your *minimum service level* by circling one of the numbers in the *first* column; (b) your *desired service level* by circling one of the numbers in the *second* column; and (c) your perception of your own institution's service by circling one of the numbers in the *third* column.

	My *Minimum* service level is:		My *Desired* service level is:		My Perception of my institution's service performance is:		
When it comes to…	**Low**	**High**	**Low**	**High**	**Low**	**High**	**No opinion**
1. Full time assignment of faculty members	1 2 3	4 5	1 2 3	4 5	1 2 3 4 5		N
2. Prior industry experience of students	1 2 3	4 5	1 2 3	4 5	1 2 3 4 5		N

DATA COLLECTION AND ANALYSIS WITH THE ALTERNATIVE INSTRUMENT

The data source was primary and survey method was adopted for data collection. The survey was conducted in ten institutions offering two-year full time postgraduate management degree or diploma programmes in two states in eastern India viz. Orissa and West Bengal. This was done for convenience of data collection. There is a good mix of business schools in this region, from top ranking, established and renowned ones to a number of new and not so well known ones. Data has been collected from varied types of institutions with different forms of ownership like university and deemed university departments, autonomous institutions and university-affiliated colleges.

Sampling of institutions was non-probabilistic or judgmental sampling. However sampling of faculty and students of the institutions was done on a probabilistic or random basis. As explained by Calder et al. (1981), strict statistical sampling may not always be feasible and other procedures may be used to improve the representativeness of individuals in the research. However, when these alternative procedures are employed, the application of results is based on the assumption that the sample(s) accurately reflects the population. When research samples are used to test theory, homogeneous respondents e.g. students, permit more exact theoretical predictions and also decrease the chance of making a false conclusion because error variance is reduced and sensitivity of statistical tests in identifying the significant relationships is better (Calder et al., 1981). Thus the two homogeneous groups of respondents viz. students and faculty chosen for the present research seems proper given the purpose for which the data is to be used.

A point may be raised that the findings are applicable to only the geographical area from where data has been collected. However, looking into the diverse regional and academic backgrounds of the students and faculty of these institutions, it may be assumed that their responses will reflect the perceptions of students and faculty of the country. The

study does not reflect findings about any particular institution, as only aggregated data has been used.

The instrument was sent to 900 students of whom 523 responded. Out of these, 344 questionnaires were filled completely and could be used. It was also sent to 150 full time faculty members and 48 complete responses were received from them. To ensure genuine responses, all respondents were assured of complete anonymity and confidentiality and their participation was purely voluntary. The questionnaire was self administered by respondents.

First, the reliability of the scale was tested using Chronbach's alpha to ascertain the internal consistency of the scale using SPSS 10.0 package. The reliability (α value) was found to be 0.9538. This shows that the instrument has excellent reliability.

Table – 3 shows the minimum and desired expectation levels and zones of tolerance of the quality dimensions.

Table – 3: Expectations And Zones Of Tolerance For Items Of Alternative Questionnaire

Dimension	Item Description	Minimum Expectations	Desired Expectations	Zone of Tolerance
Intellectual property	Full time assignment of faculty members	3.27	4.38	1.10
	Industry or corporate experience of faculty	3.45	4.31	0.86
	Academic qualification of faculty	3.56	4.34	0.79
	Consultancy, research and publications by faculty	3.24	4.17	0.92
	Publishing journals and books by institute	3.23	4.16	0.93
Intellectual property (Average)		3.35	4.27	0.92
Selection procedure	Prior industry experience of students	2.95	3.92	0.97
	Standardized written examination, group discussion and personal interview for student admission	3.42	4.28	0.86
	Psychometric tests for student admission	3.20	4.12	0.92
Selection procedure (Average)		3.19	4.11	0.92
Support mechanisms	Latest reference books, journals (including on-line journals), business magazines and research papers in the library	3.41	4.37	0.96
	Latest information & communication technologies and 24 hour Internet facilities	3.47	4.40	0.92
	Visionary leadership, well-defined mission and a distinct logo of institution	3.32	4.19	0.87
	Attractive buildings; luxurious guesthouse and well-equipped classrooms	3.28	4.25	0.97

	Placement of all graduating students by the institution	3.56	4.47	0.91
	Adequate and competent support staff	3.32	4.21	0.89
	Quality of placement provided	3.37	4.42	1.06
Support mechanisms (Average)		3.39	4.33	0.94
Networking	Networking with industry and promoting institution's achievements	3.36	4.42	1.06
	Alumni endowments for research and institute development	3.28	4.27	0.99
	Collaborating with other Indian or foreign institutions and promoting student and faculty exchange programmes	3.11	4.14	1.03
	Arranging regular talks by eminent industrialists &/or CEOs; conducting business quizzes, seminars and conventions	3.40	4.33	0.94
	Social work and tie-up of institution with NGOs & involving students in social work	3.06	4.22	1.16
Networking (Average)		3.24	4.28	1.04
Course Curriculum	Offering & designing courses designed as per current industry requirements with project work as an important element of all courses	3.44	4.38	0.94
	Regular industry visits & need-based on- job training for students	3.27	4.25	0.98
	Case studies in all courses	3.48	4.31	0.83
	Standardized courses benchmarked against those of the best institutions in the world	3.38	4.27	0.89
Course Curriculum (Average)		3.39	4.30	0.91

It was decided to go for hypothesis testing to find if there is any difference in the importance attached by the students to the various quality dimensions; and if there is any difference in the perceptions of students and faculty members regarding these dimensions. The tests were done using MS Excel.

Hypothesis 1:

Hypothesis 1a:

H_o: Consumer's minimum expectations are same for the five quality dimensions

H_a: There is significant difference between consumer's minimum expectations for the five quality dimensions

Hypothesis 1b:

H_o: Consumer's desired expectations are same for the five quality dimensions

H_a: There is significant difference between consumer's desired expectations for the five quality dimensions

One way Analysis of Variance (ANOVA) was used to test these hypotheses. Table – 4 shows the results of the tests.

Table – 4: Comparison Of Five Dimensions Of Alternative Questionnaire

ANOVA: Single Factor:

Comparing minimum expectation values:

SUMMARY

Groups	Count	Sum	Average	Variance
Column 1 (Intellectual Property)	344	1152.4	3.35	0.389096
Column 2 (Selection Procedure)	344	1097.667	3.190891	0.560474
Column 3 (Support mechanisms)	344	1166.429	3.390781	0.437373
Column 4 (Networking)	344	1115.2	3.24186	0.475211
Column 5 (Course curriculum)	344	1167.25	3.393169	0.516433

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	11.63291	4	2.908227	**6.113352**	6.97E-05	**2.377114**
Within Groups	815.8552	1715	0.475717			
Total	827.4881	1719				

Comparing desired expectation values:

SUMMARY

Groups	Count	Sum	Average	Variance
Column 1 (Intellectual Property)	344	1469.2	4.27093	0.254313
Column 2 (Selection Procedure)	344	1412.667	4.106589	0.373445
Column 3 (Support mechanisms)	344	1489.714	4.330565	0.259183
Column 4 (Networking)	344	1471.4	4.277326	0.247648
Column 5 (Course curriculum)	344	1480.25	4.303052	0.316966

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	10.58172	4	2.645429	**9.112397**	2.77E-07	**2.377114**
Within Groups	497.8833	1715	0.290311			

Total	508.465	1719

The above able shows that the observed F values (6.113352 and 9.112397 for the first and second tests respectively) are more than $F_{critical} = 2.377114$ (for $\alpha = 0.05$). So, the null hypotheses 1a and 1b are both rejected. It may thus be inferred that there is a significant difference between the five groups for both minimum and desired expectation values.

This shows that perceptible differences exist between the five quality dimensions of the scale. This was not so for the five SERVQUAL dimensions. It can thus be inferred that the items of the alternative instrument are better understood by the user, and are more relevant and discerning than the items of the SERVQUAL scale.

Hypothesis 2:

H_o: There is no significant correlation between the five quality dimensions

H_a: There is a significant positive correlation between the five quality dimensions

Correlation Analysis was used to test the hypothesis. The results are shown in Table – 5. A significant positive correlation was found between the dimensions. High inter item correlations show that the scale has high reliability and all the items are measuring the same underlying construct.

Table – 5: Correlations Between Zones Of Tolerances Of Dimensions Of Alternative Questionnaire

	Intellectual Property	Selection Procedure	Support Mechanisms	Networking	Course Curriculum
Intellectual Property	1				
Selection Procedure	0.703203	1			
Support mechanisms	0.715287	0.673992	1		
Networking	0.667595	0.67809	0.740034	1	
Course curriculum	0.720321	0.704971	0.722464	0.733858	1

Hypotheses 3:

Hypothesis 3a:

H_o: the minimum expectations for the five quality dimensions are independent of the group of stakeholder (viz. students and faculty) of an institution i.e. minimum expectations are same across groups

H_a: the minimum expectations for the five quality dimensions depend on the stakeholder group i.e. minimum expectations vary between the groups

Hypothesis 3b:

H_o: the desired expectations for the five quality dimensions are independent of the group of stakeholder i.e. desired expectations are same across groups

H_a: the minimum expectations for the five quality dimensions depend on the stakeholder group i.e. desired expectations vary between the groups

Chi-square ($\chi 2$) test of independence was used to test the two hypotheses. The results are shown in Table – 6. Observed χ^2 is 0.9999 for the first test and 0.999996 for the second. In MS Excel, CHITEST returns the value from the χ^2 distribution for the statistic and the appropriate degrees of freedom (df), where df = (number of rows - 1)(number of columns - 1). Here df = (2-1)(5-1) = 4. At $\alpha = 0.05$, Critical $\chi^2 = 9.488$ (from χ^2 table). So, both the null hypotheses 3a and 3b are accepted. It may thus be inferred that there is no difference between the importance attached to the parameters by the two stakeholder groups viz. students and faculty members.

Table – 6: Comparing Perceptions Of Two Stakeholder Groups

$\chi2$ *Test Of Independence*						
For Minimum Expectation Levels:						
Actual	ipmin	spmin	smmin	netmin	ccmin	
Faculty	3.4125	3.055556	3.553571	3.1625	3.328125	16.51225
Student	3.35	3.190891	3.390781	3.24186	3.393169	16.5667
	6.7625	6.246447	6.944352	6.40436	6.721294	33.07895
Expected	ipmin	spmin	smmin	netmin	ccmin	
Faculty	3.375684	3.118083	3.466461	3.196909	3.355115	
Student	3.386816	3.128364	3.477891	3.207451	3.366179	
					0.99999	

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For Desired Expectation Levels:					

Actual

	ipdes	spdes	smdes	netdes	ccdes	
Faculty	4.304167	3.944444	4.470238	4.225	4.291667	21.23552
Student	4.27093	4.106589	4.330565	4.277326	4.303052	21.28846
	8.575097	8.051034	8.800803	8.502326	8.594719	42.52398

Expected

	ipdes	spdes	smdes	netdes	ccdes
Faculty	4.28221	4.020505	4.394923	4.24587	4.292009
Student	4.292887	4.030529	4.40588	4.256456	4.30271

0.999996

Hypothesis 4:

Hypothesis 4a:

H_o: there is no difference between the minimum expectation levels of the academic and non-academic indices of quality

H_a: there is a significant difference between the minimum expectation levels of the academic and non-academic indices of quality

Hypothesis 4b:

H_o: there is no difference between the desired expectation levels of the academic and non-academic indices of quality

H_a: there is a significant difference between the desired expectation levels of the academic and non-academic indices of quality

The academic index is defined to include three quality dimensions viz. Intellectual Property (five items), Course Curriculum (four items) and Selection Procedure (three items). The non-academic index, on the other hand, includes two dimensions viz. Support Mechanisms (seven items) and Networking (five items). It may be noted that both the academic and non-academic indices have twelve items each.

Two-sample t test for equality of means was used to test the two hypotheses. The results are shown in Table – 7. In both cases, observed t values (0.917 and 0.03664 for the first and second test respectively) are less than the critical t = 1.9634 (at $\alpha = 0.05$). So, the null hypothesis was accepted in both cases. It may thus be inferred that there is no

significant difference between the importance given to the academic and non-academic indices by the stakeholders.

Table – 7: Comparison Of Academic And Non-Academic Indices Of Quality

t-Test: Two-Sample Assuming Equal Variances *Comparing Minimum Expectation Values*		
	Non-academic	**Academic**
Mean	3.316320598	3.311353359
Variance	0.406323568	0.385798901
Observations	344	344
df	686	
P(T<=t) two-tail	**0.91758548**	
t Critical two-tail	**1.963426257**	
Comparing Desired Expectation Values		
	Non-academic	**Academic**
Mean	4.303945183	4.226857235
Variance	0.216472163	0.249808656
Observations	344	344
df	686	
P(T<=t) two-tail	**0.036641397**	
t Critical two-tail	**1.963426257**	

Hypothesis 5:

H_o: there is no correlation between the academic and non-academic indices of quality.

H_a: there is a strong positive correlation between the academic and non-academic indices of quality

Correlation analysis was used to test the two hypotheses. A correlation coefficient of 0.892 is found between minimum expectation values of academic and non-academic dimensions; for desired expectation values, correlation is 0.854 and that between zones of tolerance is 0.834. Thus it can be inferred that there is a strong positive correlation between the academic and non-academic indices.

CONCLUSION AND SCOPE FOR FUTURE WORK

This article described an empirical study aimed at identifying quality parameters important for management institutions and developing a questionnaire or survey instrument using those parameters. This questionnaire can be used to assess the quality of an

institution in terms of the stakeholders' perception about the gap between the level of service provided and the desired level.

Twenty-four parameters were identified. These were grouped under five major quality dimensions viz. Intellectual Property, Selection Procedure, Support Mechanisms, Course Curriculum and Networking. A twenty-four-item questionnaire was developed with these parameters. This questionnaire used the three-column SERVQUAL format to measure the customers' minimum and desired expectation levels and also the perception level for each parameter.

Five hypotheses are also tested using the data collected with the alternative instrument. The results of hypothesis testing showed that there is a significant difference between the importance attached to the five quality dimensions of the alternative instrument and the dimensions are significantly correlated to each other. The importance given to the quality dimensions by the students and faculty members is not significantly different. The academic and non-academic indices of are considered equally important and there is a strong positive correlation between them.

The validity of the proposed questionnaire and its applicability of the questionnaire for other higher educational institutions may be tested. The hypotheses may also be tested using samples from institutions in other regions of the country. The instrument may be used as a tool for grading management institutions into different levels depending on their aggregate MSA and MSS scores.

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Does Futures Trading Effect Spot Price Volatility? A Study on NSE Nifty

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The belief that trading activity in equity futures markets can lead to excess volatility in spot equity markets is widely held. The popular opinion is that equity index futures allow traders to obtain market-wide risk exposure with substantially lower transaction costs than if spot positions are taken. Trading on NIFTY futures was introduced on the 12th of July 2000. This study aims to study the impact of the introduction of stock index futures on the volatility of the Indian spot markets. The change in the volatility is compared not only in absolute levels of volatility but also in terms of the structure of the volatility, which was measured by Chow test. Weekly volatility series were constructed from daily spot closing prices for NSE Nifty index. The data set consisted of 558 weekly observations from April 1997 to April 2007. The study considered six different measures of volatility including the Figlewski (1981) volatility measure. A general dynamic linear regression model was constructed to explain spot volatility. The investigation utilized the GARCH family of statistical models like GARCH-M and I-GARCH model, to investigate volatility in NSE Nifty spot prices both before and after the onset of futures trading. The tests confirmed that there was no structural change after the introduction of futures trading. The GARCH analysis revealed that whilst the pre-futures sample was integrated the post-futures sample was stationary. This observation implies that the persistence of shocks has decreased since the onset the derivative trading. Further, it is evidenced that spot returns volatility is less important in explaining spot returns after the advent of futures trading in NSE Nifty index. Results from the regression analysis are consistent with the majority of previous studies in that they reveal no apparent change in volatility. In conclusion we find no evidence to suggest that there has been a spillover of volatility from the futures to the spots market in NSE Nifty index. Our results imply that futures markets serve their prescribed role of improving pricing efficiency and providing a hedging vehicle which lessens the importance of volatility.

There is a common belief that stock index futures are more volatile than the underlying spot market because of their operational and institutional properties. The close relationship between the two markets makes possible the transference of volatility from

futures market to the underlying spot market. It is, therefore, not surprising that since the inception of futures contracts relating to the stock market has attracted the attention of researchers world over.

In the last decade, many emerging and transition economies have started introduction of derivative contracts. Equity derivatives trading started on June 9, 2000 with introduction of stock index futures by Bombay Stock Exchange (BSE). National Stock Exchange (NSE) also commenced its trading on 12 June, 2000 based on S&P Nifty. Trading on NIFTY futures was introduced on the 12th of July 2000.Trading on stock futures was introduced in the NSE in the 9th November, 2001. Subsequently, other products like stock futures on individual securities, index options and options on individual securities were introduced. The launch of derivative products has significantly altered the movement of the share prices in the spot market. Derivatives products are turning more and more popular day by day. Nifty futures are scaling new heights and breaking records daily, in terms of volumes and volatility.

The impact that the derivatives market has on the underlying spot market remains an issue debated again and gain, with arguments both in favor and against them. This study aims to study the impact of the introduction of stock index futures on the volatility of the Indian spot markets.

The introduction of equity index futures markets enables traders to transact large volumes at much lower transaction costs relative to the cash market. Various studies have been conducted to assess the impact of derivatives trading on the underlying market mostly related to US and other developed countries markets. In a study of 25 countries, Gulen and Mayhew (2000) find that futures trading are associated with increased volatility in the United States and Japan. In some countries, there is no robust, significant effect, and in many others, volatility is lower after futures have been introduced. Antoniou and Holmes (1995) examined the relationship between information and volatility in FTSE-100 index in the U.K. using GARCH technique. Although they find that introduction of FTSE-100 index futures has changed volatility in the spot market, they attribute this to better and faster dissemination of information flow due to trading in stock index futures.

A number of studies has been carried out to examine the impact of introduction of index futures on underlying stock market using different methodologies such as (a) simple analysis of variances, (b) linear regression analysis, (c) GARCH Models, and (d)

causality analysis. These studies, however, have largely been concerned with the developed capital markets such as those of the US., UK., Japan, and Hong Kong. In recent years, some efforts have also been made to examine these issues for some emerging markets such as those of Malaysia and Portugal etc. In so far as the developed capital markets such as those of the US., UK., Japan, and Hong Kong are concerned; in general, most of the studies find little or no evidence of increased stock market volatility following introduction of futures contracts.

Very few studies attempted to know the impact of introduction of derivatives trading in emerging market economies like India. There has been widespread interest in the effects of futures trading on prices in the underlying spot market. It has often been claimed that the onset of derivative trading will destabilize the associated spot market and so lead to an increase in spot price volatility there. Others have argued to the contrary, stating that the introduction of futures trading will stabilize prices and so lead to a decrease in price volatility. It has been suggested (see Baumol 1957) that the debate cannot be resolved wholly on a theoretical level and so should be analyzed by empirical investigation.

In this study we use the GARCH family of statistical models which are a superior technique for modeling volatility. A dynamic linear regression model is constructed in order to give insights into the possible effects of futures trading. Since this is a technique common to many previous studies it allows comparison of or regression results with those of other studies. In addition, it allows comparison of this study's GARCH result with those from he more traditional technique.

In the next section we present the theoretical background relating introduction of futures trading in NSE Nifty index and about its impact on spot volatility. This is followed in the third section by a brief review of previous empirical studies which have investigated the question for a number of different markets. The fourth section outlines the methodologies used in this paper. The results from our tests are presented and discussed in this section. The final section provides a summary and conclusions.

THE THEORITICAL BACKGROUND

The Indian capital market has witnessed a major transformation and structural change from the past one decade as a result of ongoing financial sector reforms initiated by the Govt. Bringing the Indian capital market up to a certain international standard is

one of the major objectives of these reforms. Due to such reforming process, one of the important step taken in the secondary market is the introduction of derivative products in two major Indian stock exchanges (viz. NSE and BSE) with a view to provide tools for risk management to investors and to improve the informational efficiency of the cash market.

In the last decade, many emerging and transition economies have started introducing derivative contracts. Policymakers and regulators in these markets are concerned about the impact of futures on the underlying cash market. One of the reasons for this concern is the belief that futures trading attract speculators who then destabilize spot prices. Since futures encourage speculation, the debate on the impact of speculators intensified when futures contracts were first introduced for trading; beginning with commodity futures and moving on to financial futures.

Any increase in stock market volatility that has followed the onset of futures trading has generally been taken as justifying the traditional view that the introduction of futures markets induces destabilizing speculation. This has led to calls for greater regulation to minimise any detrimental effects. An alternative view is that futures markets provide an additional route by which information can be transmitted, and, therefore, increased spot market volatility may simply be a consequence of the more frequent arrival, and more rapid processing of information. Thus, futures trading may be fully consistent with efficiently functioning markets.

In the Indian context, derivatives were mainly introduced with a view to curb the increasing volatility of the asset prices in financial markets; bring about sophisticated risk management tools leading to higher returns by reducing risk and transaction costs as compared to individual financial assets. However, it is yet to be known if the introduction of stock index futures has served the purpose claimed by the regulators. The introduction of futures trading enhances both the inventive and means for speculation. The speculative trade associated with futures trading has been accused, however, of destabilizing the underlying spot market inducing price volatility. Theoretical discussion of the influence of speculative activity in derivatives on primary markets does not , however, find a consensus of opinion. Harries (1989), suggests that the increase in well informed speculative trade brought to the market by the onset of derivative trading may have two opposite effects on volatility. The market may experience an increase in price volatility as futures trading enhances the price discovery mechanism and so new information

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concerning fundamentals is more rapidly impounded into prices. (see Garbade and Silber,1983) Since futures markets face less friction than spot markets, particularly with respect to lower transaction costs, prices should respond more quickly to new information (see Cox, 1976). Through a process of arbitrage these price adjustments will be transmitted to the underlying spot market. In a similar vein Chassard and Halliwell (1986), comment that speculation can artificially distort price movements so as to exaggerate the normal response to fundamentals. This effect has been noted by a number of other commentators (see Kaldor,1939 ; Baumol,1957; Edwards ,1988).

Volatility could, however, perceivably decrease due to the liquidity which speculators provide the market. This added liquidity would allow spot traders to hedge their positions and so curb volatility attributable to order imbalances. The availability of the risk transference afforded by futures markets may also reduce spot price volatility by removing the need to incorporate a risk premium to compensate for possible adverse future price shifts (see Figlewski, 1981). Problems due to the lack of liquidity, and how this can induce volatility, are reviewed by Figlewski (1981).A different view as to how speculation can reduce price volatility is furnished by Friedman (1953), who suggests that speculation can lead to a stabilization of prices as speculators buy when prices are low and sell when they are high. The result of these forces on prices will be to constantly check price swings and guide prices towards the mean. As previously stated, however, the question is unresolved on a theoretical level and so it is to empirical testing which we must turn in order to gain insights into this relationship.

OBJECTIVES OF THE STUDY

India is almost unique in having started trading in individual stock futures in a rather big way, i.e. big in the sense of substantially important in relation to the cash market. The proposed study will examine how the introduction of individual stock futures in India has impacted the cash market i.e., on the spot volatility. This paper explores the impact of the introduction of futures trading on cash market volatility using data on stock index futures and individual stock futures traded on the S & P CNX Nifty (India). This attempts to investigate the change, if any, in the volatility observed in the Indian stock market due to the introduction of futures trading. The change in the volatility is compared not only in absolute levels of volatility but also in terms of the structure of the volatility.

This is done to give insights into the way the futures market is influencing the Indian spot market's volatility.

This study attempts to analyse the effect of the introduction of Futures trading in the Indian capital market. The underlying spot market volatility is estimated using symmetric GARCH methods.

The specific main objectives of this study are:

a) To study the effects of introduction of futures contracts on price volatility in Indian capital market.

b) To analyse the extent to which futures trading influence the volatility of underlying spot market,

LITERATURE REVIEW

Several theories predict a positive relation between return volatility and trading volume . Cox (1976) and Figlewski (1981) found results that support that futures markets increase stock market volatility. Because of their high degree of leverage, futures markets are likely to attract uninformed traders. The lower level of information f futures traders with respects to cash market traders is likely to increase the asset volatility. The opposite current of literature claims that futures markets play an important role of price discovery, and have a beneficial effect on the underlying cash markets. According to Schwarz and Laatsch (1991), futures markets are an important mean of price discovery in spot markets. Clark (1973), and Tauchen and Pitts(1983) develop the mixture of distribution hypothesis in which the sequential arrival of new information generate both trading volume and price movements, with both increasing during periods characterized by numerous shocks. Epps and Epps (1976) present a model in which an increase in the extent to which traders disagree as to the valuation effect of new information is associated with larger absolute price changes and larger volume. Admati and Pfleiderer (1988) present a model in which traders choose to transact when markets are most active, implying that transactions and price movements are bunched in time. There is also substantial empirical evidence of a positive relations between return volatility and trading volume.

The popular opinion is that equity index futures allow traders to obtain market-wide risk exposure with substantially lower transaction costs than if spot positions are taken, and to establish a larger position (due to lower margin requirements) than would

be possible in the spot. Models such as Danthine (1978) imply that the existence of futures markets improves market depth and reduces volatility, because the cost to informed traders of responding to mispricing is reduced.

The empirical evidence on the effects of futures trading on spot volatility is inconclusive. Edwards (1988) compares estimated stock market volatility before and after the introduction of equity futures, and documents a small but statistically significant decline in volatility. By contrast, Figlewski (1981) documents a positive relation between the volatility of GNMA securities prices and open interest in GNMA futures contracts, leading him to conclude that "futures market activity increased the volatility of prices".

The empirical techniques used are varied but the general approach is to consider spot price variability in periods before and after the onset of futures trading and to test for significant changes. Less common is the use of cross-sectional analysis where spot volatility is compared for similar markets with and without futures trading (see Harris,1989).

In general, past empirical studies have found that the establishment of futures trading has either reduced the price volatility of the underlying commodity/asset, or has had no discernable effect (see Corgel and Gay,1984 ; Turnnosky,1983). Technical assessment of the influence of futures trading has ranged from simple static regression, univariate Box-Jenkins analysis and causality tests to multivariate time series analysis, Box-Tiao intervention analysis, and more recently, ARCH models. In the following we review some examples of these investigations.

Simpson and Ireland (1982), investigated the effects of the introduction of futures trading on US Government National Mortgage Association (GNMA) certificates. The study used the first differences of both daily and average weekly prices. As a preliminary search into the effects of derivative trading the authors specified a static regression model with a proxy variable to remove extraneous influences, a dummy for the onset of futures trading, and an interaction term. The regression model was constructed for both pre-futures and post-futures sub-samples for daily and weekly volatility measures. Tests were carried out for significant changes were recorded the authors concluded that there had been no increase in spot price volatility since the advent of derivative trading.

Froewiss (1978), investigated the GNMA market using univariate Box-Jenkins analysis for weekly per cent changes in spot prices. Pre and post-futures sub-samples were modelled using Box-Jenkins techniques and significant parameter changes between

the two periods were tested for. Results indicated that there had been no statistically significant parameter change, suggesting that spot volatility had not been influenced by the introduction of futures trading. Corgel and Gay (1984), investigated the effects of the onset of GNMA derivative trading on spot market prices using Box-Tiao intervention analysis. Intervention analysis has the advantages that it is specifically designed to model the impact of events on time series data, and that it can describe the nature of the impact. The study's results confirm the general finding that the onset of derivative trading did not have a destabilizing effect on spot market prices, but rather that a long-run stabilizing effect is found.

Bhattacharya et al. (1986), used the Figlewski measure to calculate weekly volatility series for spot and futures prices for GNMAs. The authors hypothesized that the influence of futures volatility on spot volatility could be tested using causality tests. The study adopted a Granger definition and methodology for testing causality and results suggested no change in spot volatility since futures trading began. Whilst the Bhattacharya study improved on previous studies in its use of volatility measure, the use of causality tests have been criticized. Edwards (1988b), argues that causality tests cannot infer whether futures trading has stabilized or destabilized spot markets. He argues that the appearance of futures volatility leading spot volatility could be explained by futures markets reacting more quickly to information which will eventually reach the spot market where it will have a like effect on volatility.

Baldauf and Santoni (1991) have used an ARCH analysis to test for increased volatility in the S & P 500 since the introduction of futures trading and the growth of program trading. Prices were modelled for periods before and after the onset of futures trading and the model specification tested for significant change. The study found no evidence of a shift in the model parameters suggesting no effect on volatility from derivative trading.

In the Indian scenario, we have the few related empirical works. Premalatha Shenbagarman(2003) examined the impact of introduction of NSE Nifty index futures on Nifty index. Using an event study over the period from October 1995 to December 2002, she tested for changes in the volatility before and after the introduction Using GARCH techniques to model the time series she concluded that futures trading has not lead to a change in the volatility of the underlying stock index but the structure of volatility seems to have in changed post-futures period. Nagaraj K S and Kotha Kiran Kumar (2004)

studied the impact of Index futures trading on spot market volatility using the data from June 12,2000 to February 27, 2003 of S&P CNX NSE Nifty. Using ARMA-GARCH model, the study also examined the effect of the September 11, terrorist attack; the relation between futures trading activity; and spot volatility has strengthened, implying that the market has become more efficient and assimilating the information into its prices. Nupur Helamsaria and Saikat Sovan Deb (2004) analyzed the impact of index futures on Indian stock market volatility using the data for the period June9, 1999 to August 1, 2003 of NSE 500, S&P CNX Nifty index. The results obtained using GARCH model show that the introduction of futures results in a reduction in spot market volatility. It also showed that domestic market factors represented by NSE 500 had a significant effect in determining the volatility of the Nifty index but e other international factors are found to have insignificant effect.

The outcome of investigations for the developed countries have been somewhat ambiguous , whereas in the emerging markets , they generally support the view that index futures do not increase the volatility of the spot market. Very little work has been undertaken to study impact of Individual Stock Futures on underlying spot market in a developing nation like India. Our study is significant in the sense that it covers the entire period since inception of introduction of index futures at NSE in June 2000.

DATA AND RESEARCH METHODOLOGY

Volatility has been measured using standard deviations, rolling standard deviations, etc., by researcher like Hodgson et al.(1991), .However, simply testing for changes in unconditional variance may be inadequate as some researchers show that stock index returns are conditionally heteroskedastic (Bollerslev, 1986). Hence, the GARCH model has been a preferred measure of volatility by many researchers (Antoniou and Holmes, 1995) to accommodate for heteroskedasticity in the observed returns..

Weekly volatility series were constructed from daily spot closing prices for NSE Nifty index. The High frequency data for the NSE Nifty stock index futures contract is obtained from the NSE Research & Publication wing on CD-ROM, which contains information on the time to the nearest second, contract type, stock/ index code, delivery month, price, transaction code (bid, ask or trade), and traded volume. The data set consisted of 558 weekly observations from April 1997 to April 2007. This represented 206 observations before futures trading and 352 observations afterwards.

The study considered six different measures of volatility in order to avoid test sensitivity to the measure of volatility used. The measures used were:

1. weekly price range,
2. absolute weekly average price change,
3. squared weekly average price change,
4. absolute log of weekly average price relative,
5. squared log of weekly average price relative,
6. the Figlewski (1981) volatility measure (given below),

$$V_T = \sqrt{\frac{1}{N} \sum_{t=1}^{N} (P_t - P_{t-1})^2}$$

where V_T is volatility in week T

P_t is spot price on day t

N is the number of days per week.

A general dynamic linear regression model was constructed to explain spot volatility. Preliminary model specifications included a dummy variable introduced to account for the onset of futures trading, proxy variables to account for general market volatility, and an interaction term. The proxy variables nominated (for which there was no futures trading), was NSE Nifty Junior. The coefficients on the dummy for the onset of futures trading, on all proxy variables, and on the interaction term were found to be insignificant. A well specified, parsimonious model was generated for each measure of volatility. All measures of volatility generated an AR(1) model except Figlewski measure which (marginally) accepted an (2) process. Chow tests were carried out on all models over the whole period to check for structural change in order to determine whether futures trading had had an effect on the dependent variable.

Following Engle(1982), Diebold and Nerlove (1989), Schewert and Seguin (1990), weekly returns for NSE Nifty spot prices (S_t in equation A of Table-2) were used as the dependent variable in GARCH estimation. Returns were calculated from an arithmetic mean of daily closing prices. With GARCH analysis one aims to model directly the heteroscedasticity in the variance of a price series, hence the choice of dependent variable. The investigation utilized the GARCH family of statistical models to

investigate volatility in NSE Nifty spot prices both before and after the onset of futures trading. Since GARCH models account specifically for systematic changes in the variance of a time series by modeling the conditional variance they are ideally suited to the study of volatility.

A GARCH-M model was estimated for both pre-futures and post-futures mean equations which regressed returns on a constant and an error term. The autoregressive conditional heteroscedastic (ARCH) model, first proposed by Engle (1982), differs from traditional regression techniques in that homoscedasticity of the error term is not assumed. Rather, the error variance is represented as a time series itself which evolves as s linear function of lagged squared errors. Thus, for example, an AR(1) process with errors that followed an ARCH(q) process has the following representation:

$$X_t = \alpha + \beta X_{t-1} \, \varepsilon_t \qquad \varepsilon_t \sim N(0, h_t) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

$$h_t = a_0 + {}_{t=1}\sum\nolimits^q a_t \, \varepsilon^2_{t-1} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots. (2)$$

Bollerslev (1986) , extended Engle's ARCH to a generalized ARCH or GARCHA process. With GARCH the conditional variance is modeled as a linear function of the lagged conditional variance in addition to the past error variances contained in ARCH representations. A GARCH (p,q) process is represented as:

$$h_t = a_0 + {}_{t=1}\sum\nolimits^q a_t \, \varepsilon^2_{t-1} + {}_{j=1}\sum\nolimits^p \, b_j \, h_{t-j} \ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

In this study we model the NSE Nifty returns directly as a GARCH process; the ARCH representation is not considered since it is implicit in the more general GARCH. Further extension of GARCH include GARCH-in-mean (GARCH-M) and integrated GARCH(I-GARCH), both of which are considered in the present paper.

GARCH-M differs from GARCH n that the conditional variance (h_t) is included as an explanatory variable in the mean equation. Thus where GARCH allows the conditional variance to directly explain the dependent variable. Under GARCH-M, therefore, equation (1) could be rewritten :

$$X_t = \alpha + \beta X_{t-1} + \gamma \, h_t + \varepsilon_t \quad \ldots\ldots\ldots\ldots\ldots\ldots.. (4)$$

where h_t is an in equation (3).

Engle and Bollerslev (1986) , introduced a further extension to GARCH in which the model specification was characterized by nonstationary variances. In this situation any shock to the variance of a process is permanent. The model referred to as I-GARCH may be thought of as the variance equivalent of a unit root in the conditional mean . For a

process to be identifies as I-GARCH the parameters a_t and b_t in equation (3) will sum to unity.

RESULTS

In general the results were not sensitive to the measure of volatility used. The tests confirmed that there was no structural change after the introduction of futures trading, i.e. that each model's coefficients had not changed substantially between the pre-futures and post-futures periods, for all measures except the weekly price range (see Table 1).

Table 1 : Chow Tests for Structural Charges

Volatility Measure	Computed Value	Critical Value
1	2.66	3.01
2	3.39*	3.01
3	2.37	3.01
4	2.49	3.01
5	2.15	3.01
6	1.42	2.67

* Indicates structural change between the two periods

These results suggest that the onset of derivative trading had not influenced spot price volatility. The insignificance of the proxy variables raises questions as to the reliability of inferences made about the impact of derivative trading on volatility, since changes could be due to a number of other factors. Difficulties with filtering the effects of other determinants are, however, a common problem experienced by numerous other studies. The techniques for resolving this problem have also been questioned by Edwards (1988a and 1988b), who contends that the use of proxies implies an unacceptable assumption of market segregation. Thus, whilst it is important to realize that inferences made from empirical results must be evaluated with caution, it is recognized that no satisfactory alternative is apparent.

Table-2 summarizes the test results obtained from this study. In order to select an adequate and parsimonious GARCH representation for the data we estimated a number of GRACH-M (p,q) equations for all combinations of p=1,2,3 and q=1,2,3. On the basis of log likelihood tests, the GARCH (1,1) was found to be the most appropriate

representation for both pre-futures and post-futures samples. The same proxy variables as used in the OLS regression were introduced into the mean equation for GARCH. The proxies were found to be insignificant in all cases.

Table-2 : GARCH-M models for NSE Nifty Returns

$$S_t = \alpha + \beta X_{t-1} \, \varepsilon_t \qquad \ldots\ldots\ldots\ldots\ldots\ldots.. \text{(A)}$$

$$h_t = t \, a_0 + a_1 \, \varepsilon^2_{t-1} + b_1 h_{t-1} \qquad \ldots\ldots\ldots\ldots\ldots\ldots.. \text{(B)}$$

Period	α	a_0	a_1	b_1	γ
Pre-Futures	-0.845	0.742	0.178	0.769	13.741
	(0.451)	(0.154)	(0.031)	(0.017)	(3.783)
Post-Futures	-0.348	0.341	0.287	0.671	8.947
	(0.011)	(0.107)	(0.125)	(0.087)	(3.718)

Note: Figures in parenthesis are standard errors.

Pre-Futures: 02/04/1997 to 12/06/2000 ; Post-Futures: 13/06/2000 to 30/04/2007

To test for significant change n the GARCH representations we tested the null hypothesis that the GARCH parameters were equal for the two periods. For all parameters the null of no change was strongly rejected.

The statistical inadequacy of the model specification was tested using the Ljung-Box statistic for heteroscedasticity and serial correlation in the GARCH residuals. The test are Chi-squared distributed and results attested to the inadequacy of the specified models (Table-3). In addition to these findings, a number of important observations may be made from the results obtained.

Table-3 : GARCH-M for NSE Nifty Returns

Lags	Period	Ljung- Box statistic (Heterorscedasticity)	Ljung- Box statistic (Autocorrelation)
3	Pre-Futures	1.89	4.84
	Post-Futures	2.32	5.68

6	Pre-Futures	3.87	7.82
	Post-Futures	6.81	8.37
9	Pre-Futures	5.79	13.49
	Post-Futures	9.11	12.45
12	Pre-Futures	10.76	26.74
	Post-Futures	19.67	18.23
Dickey-Fuller Integration		-2.18	-18.79

Note: Ljung-Box statistic are chi-squared; Significance tests at 5% level ;

Critical value of Dickey-Fuller is -2.84.

First the pre-futures model and the post-futures model are candidates for an I-GARCH specification, with the parameters a_1 and b_1 in the pre-futures summing to 0.95 and the post-futures parameters summing to 0.86. Dickey-Fuller tests were carried out on the two models to test for an I-GARCH specification. The tests revealed that whilst the pre-futures sample was integrated the post-futures sample was stationary. This observation implies that the persistence of shocks has decreased since the onset the derivative trading.

Second, the coefficient on the conditional variance (γ) in the mean equation (4) has substantially reduced in the post-futures sample suggesting that spot returns volatility is less important in explaining spot returns after the advent of futures trading in NSE Nifty index.

Finally, the parameters of the lagged square error (a_1) and the lagged conditional variance (b_1) of the GARCH representation experienced statistically significant changes snce the onset of derivative trading, although interpretation of these changes is problematic. While a GARCH (1,1) process is maintained , the parameters of the GARCH process have undergone quite substantial changes. The values of a_0 and a_1 have increased which, in an ARCH representation, would suggest an increase in volatility (see Bauldoff and Santoni,1991).The lagged conditional variance parameter has, however, decreased.

We interpret the increase in the ARCH parameters as showing an increase in informational efficiency in the spot market due to the information content of futures prices. This increased efficiency will lead to a greater reaction to news as suggested by the increase in the a_1 'news' coefficients. The decrease in the lagged conditional variance

term (b_1) is taken as evidence that volatility is considered less important since the risk it implies can be hedged in the futures market.

CONCLUSION

In this paper we set out to examine the effects of the introduction of futures trading on the price volatility of the NSE Nifty spot market, adopting GARCH time series techniques. We used weekly data from April 1997 to April 2007. Preliminary investigations utilized a dynamic linear regression model in order to provide results comparable to previous studies, and also highlight the appropriateness of the GARCH process as a modeling technique in the study of volatility. Results from the regression analysis are consistent with the majority of previous studies in that they reveal no apparent change in volatility.

It has been documented, however, that time series returns for speculative markets show a clustering of fluctuations i.e., larger changes tend to be followed by large changes, and small by small of either sin. This appears to be the case for NSE Nifty. Such observations question the validity of linear regression models constructed under the assumption of homoscedasticity of the variance. It is for this reason that GARCH, which allows for time-varying variance in a process, is more appropriate to an analysis of volatility.

The results form the GRACH models reveal first, that while the pre-futures sample was integrated, suggesting that shocks have a permanent effect on prices, the post-futures sample was found to be stationary. This implies that the introduction of futures markets improves the quality of information flowing to spot markets, and spot prices accordingly reflect more promptly changes that occur in demand and supply conditions. The integratedness of the pre-futures market illustrates the lack of information and associated price inflexibility in the spot market. Such inflexibility prevents the immediate and continuing adjustment of prices in response to demand-supply conditions and necessitates eventual larger price and resource adjustments.

Second, the GARCH-M model indicates that the nature of spot market volatility has changed since the introduction of futures contracts. The increase in the 'news' coefficients of the GARCH process confirms the improvement in information regarding expected spot prices noted above. An indication of increase pricing efficiency in the post

market is the use by more and more companies of near-term futures prices to help set spot and forward prices.

In conclusion we find no evidence to suggest that there has been a spillover of volatility from the futures to the spots market in NSE Nifty index. Our results imply that futures markets serve their prescribed role of improving pricing efficiency and providing a hedging vehicle which lessens the importance of volatility.

The results generated by this study using GARCH provide insights into the effect of future trading on spot prices. This study, however, covers only one stock index trading on futures contracts in India. Further investigations using the GARCH technique to examine the experience of other indices and individual stocks would be interesting.

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Emotional Influences On Interpersonal Communication Skills Of Professional Women.

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Communication is an all pervasive function in any professional environment. Recently "Globalization" has brought cognitive changes among the professionals and also paved way to communicate across cultures for negotiations, discussions, meetings and conferences to achieve corporate goals in their career. During the interpersonal process, the influence of culture on communication is so strong that invisible source of great misunderstandings arise between people from different regions. This is mainly due to the differences in their cultural values and perceptions involved in the communicative situation. Nowadays, women are found in all types of work atmosphere and as a result, they do face communication challenges in a multi-cultural diversity. One of the prominent barriers identified among the professional women is the emotional influence to their interpersonal skills, especially in cross cultural communication. Hence a study was made among women of various professions to assess the commonly expressed emotions in work situations. It also helps them to realize the impact of most dominant negative emotions on communicative situations and rejuvenate their skills to create a good rapport with others.

"Emotions" are feelings with distinctive thoughts that can result in any agitation or disturbance of mind to act. Feelings are indispensable for rational decision making and they are like a compass that can guide working women in the right direction. Indeed there are hundreds of emotions found among today's digital women, with different blends, variations and mutations depending on their working styles. Some of the commonly observed emotions associated with working women are – Happy, Sad, Satisfied, Fear, Inspired, Excited, Tensed, Frustrated, Anger and Relaxed.

However, emotions may be 'Positive' or 'Negative' in a person and generally, women tend to overuse their negative feelings during interactions with superiors, subordinates and even colleagues. It may be due to family reasons, work pressure and changing environment. Further, the changing roles of women have made them to become emotionally weaker and more sensitive than men in their

reactions. Ultimately, leading to conflicts and making the environment a highly unpleasant one. Therefore, 'Emotions' are one of the influencing factors in the interpersonal communication process that creates a great difference in their communicative styles.

Gone are the days, when we measured women by their education, experience, expertise knowledge and in addition to these abilities, now they are judged by how well they handle themselves with others. Their social skills with an ability to communicate feelings both verbally and nonverbally are essential for successful team works. This study reveals the challenges of using social skills for women to communicate effectively with others. It also helps them to realize the negative emotions like anger, fear, frustration, tension, etc. involved in their professional communication and also manage them to build relationships with their team-mates for maximizing long term happiness.

THEORETICAL FRAMEWORK

Effective communication - Effectiveness in communication has been described as the life-blood of successful interpersonal relationships (Covey 1990). Communication is said to be an influence process and therefore it seems reasonable that the effectiveness of the communicator acts as a catalyst in creating a long lasting professional interpersonal relationship (Fulcher 1974).

Moreover, Joseph and Vohra (2002) have identified the seventeen characteristics of effective communicators in work situations through a survey made among twelve focus groups, consisting of middle and senior level managers. It indicates that emotional maturity is one such attribute significant to the communicators for the effective delivery of verbal or non- verbal signals.

Hypotheses 1: An effective communication skill paves way to create interpersonal relationships.

Power of emotions at work place - Alan Sanfey, a cognitive neuroscientist at the University of Arizona and his colleagues has found that emotions can influence the human brains and especially the negative emotions are powerful during the thinking and decision making process. They are also

proved to damage the routine activities of human behavior at work places (Morse 2006). However, emotions in the workplace are considered as the challenges for managerial career by Ashkanasy and Daus (2002) in their study made on emotions in organizational settings. They also convey that emotions play a very powerful role in the work place and have a great impact over their behavior. So he recommends that the managers need to develop and maintain a positive emotional climate in their organizations. Another research work undertaken by Dwan (2003) focuses on the use of self destructive emotions, ways to manifest people who are using those emotions and their effect on human behavior in the workplace.

Hypotheses 2: The level of emotions influences the effectiveness in communicative situations

Impact of emotions on the skills of professional women - A gender study on Emotional Quotient (Sloan 1997) reveals that women seem to possess significantly stronger interpersonal skills than their male counterparts but at times, women seemed to be inefficient in managing stress at work place when compared to men. So there exists a gender difference in formal communication because of imbalances in their stress levels. The researcher also expresses that this can certainly affect their ability to establish and maintain mutually satisfying relationships in their career. Nancy et al (1992) has examined through a metaphoric analyses that women working in government organizations face conflicting situations due to tensions and end up with unnecessary arguments with others.

Hypotheses 3: Communication behavior and building relationship are interdependent at work

Hypotheses 4: The emotional levels interfere in the behavioral aspects at the work place

Hypotheses 5: Negative emotions have an impact on the emotional levels, communication effectiveness, behavior in the organization and the interpersonal relationships.

Based on the review of literatures, the set of hypotheses was framed for this empirical study as shown in fig 1 and the survey was conducted on the work place emotional feelings expressed by professional women with an aims of assessing the dominance of negative emotions in their

communicative behavior. The rate of expressing their negative emotions on others was also observed during the research at four levels of emotional status. This study can facilitate women to understand the impact of their workplace negative emotions and try to mitigate them during formal interactions for achieving sustainable success in the profession.
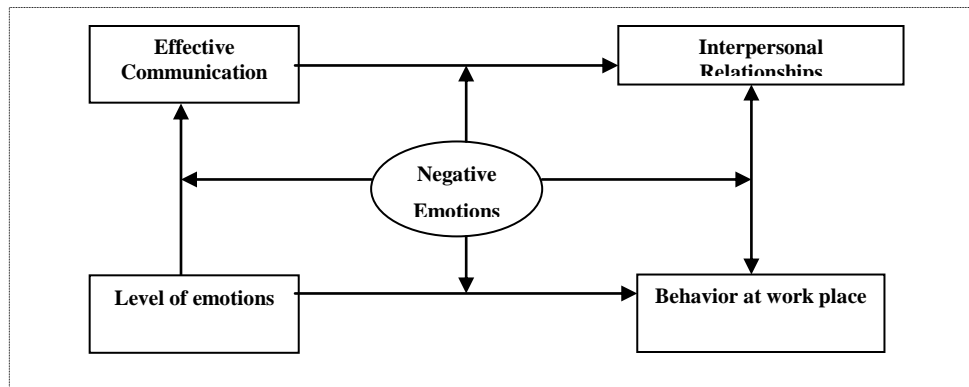

Fig 1: Impact of work place emotions on Interpersonal skill

Objectives of the study

The main aim of the study is to identify the emotional levels of the respondents and analyze the most dominant type of work place negative feelings that influence their interpersonal communication skills.

RESEARCH METHODOLOGY

About fifty women respondents working in various sectors like banks, education, customer care, administrative and insurance services were chosen at convenience. A questionnaire of five point scale was framed and used for data collection. Simple percentage analysis was adopted to satisfy the objectives of the study. The emotions involved in their day to day conversations relating to their professions were identified through the predetermined set of questions inclusive of both positive and negative emotions of women. The communication styles, behavior and reactions of the respondents were observed and further steps were taken to analyze the impact of commonly expressed negative emotions on interpersonal skills of the respondents.

Gender Based Analysis

The following points were observed among the women respondents to identify the most common negative emotions that interrupt the effective interpersonal communication at work place:

The behavior aspects of women relating to communicative situations were noted along with their feelings expressed in the process. The emotions were analyzed in **four levels** with individual scores given to each feeling of the respondents against each of the statement.
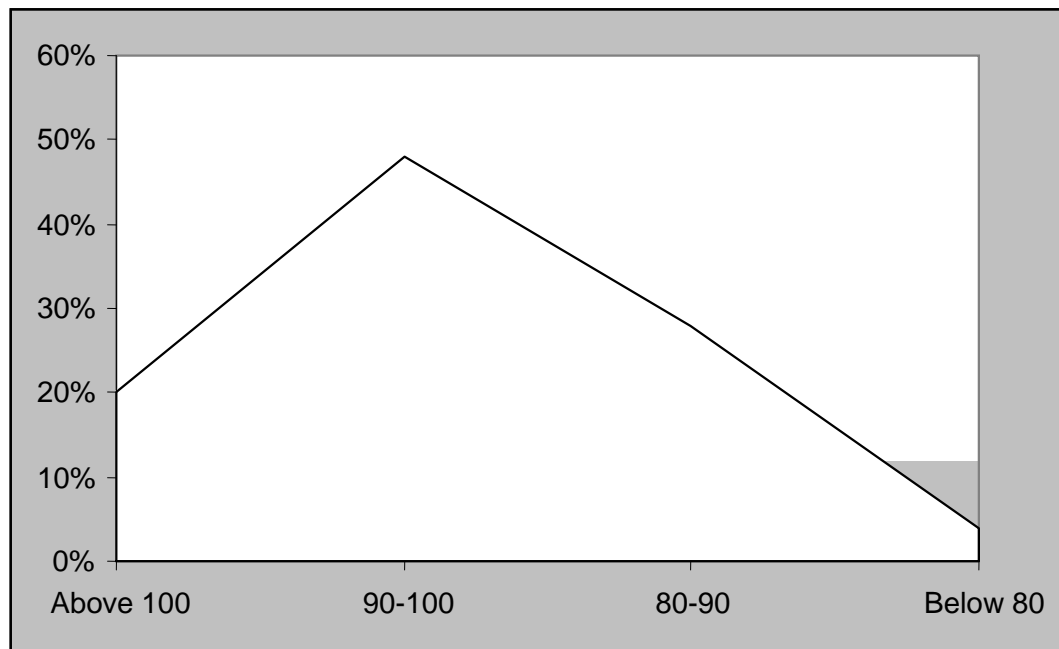

Fig 2: The four levels of emotions identified among the women at work place

(Fig 2) First level is **above 100** relating to women with balanced state of emotions at work situations and second level is **90-100** relating to women with moderately influenced by negative emotions. Third level is **80-90** relating to women with high influence of emotional feelings and lastly women **below 80** relating to overuse of their negative emotions always in their conversations with others.

As shown in fig 2, the **overall emotional level** among the respondents was analyzed and 20% of the women were found in the first level (above 100), 48% of them in the second level (90-100), 28% of them in the third level (80-90) and 4% of the respondents in the fourth level (below 80).Women found in the first level may not suffer much interpersonal barriers, whereas in the second level women may sometimes get over ruled by their particular negative feelings depending on the

situations and in the last two levels can indicate that they are very frequently affected by the dominance of some type of emotions during the conversations to interfere the process.

Henceforth eight common negative emotions, as indicated by the respondents were considered for the analyses - impatience, anger, sad, frustration, tension, anxiety, irritation and confusion. Such feelings tend to cause misunderstandings among the culturally diversified working groups. Accordingly, **"Impatience"** is one of the emotions commonly found among professional women and it was analyzed that 32% of them express impatience in their interactions. They seem to interrupt with their own comments before others can finish a statement and react immediately.

"Annoyance" or anger at work places leads women to speak deliberately during the formal conversations and cause communication breakdowns. It was found that 80% of the respondents tend to express their anger to the people around them.

"Sad" or unhappy state of emotions is also found among the professional women and is forced to react negatively. It was analyzed that 92% of them show their worries indirectly in the communication process and thereby tend to give brief replies or may be answer to the point only.

'Frustration" is another feeling expressed in work situations and women seem to jump to conclusions before all the information is presented. The study shows that 28% of the respondents suffer from frustrated feelings in the formal discussions.

"Tension" is a kind of emotion that was found prevailing among the women respondents and it was analyzed that 36% of them undergo tension at work. They usually run off at the mouth and are found in a position without knowing what to say or even how to continue the conversation.

"Anxieties" were also observed among the working women and they may express their anxieties by taking a lot of words to say something which could be said in a very few words. It was found that 16% of women had anxieties disturbing their communication styles in the working environment.

"Irritation" is also an emotion associated with the women respondents and 24% of them were found to work with a feeling of irritation. They use to fidget with some object in their hand or leg showing their disinterest to speak and listen at that moment.

"Confusion" is an emotional feeling expressed by many women at work and they may drift from topic to topic during the conversation. The study reveals that 40% of them were identified to express confused feelings in their communicative situation.
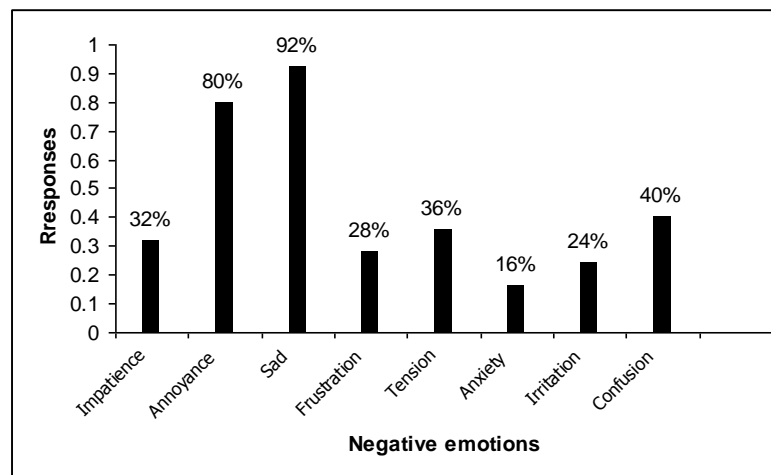

Fig 3: The responses pertaining to eight negative emotions at work place

It was also analyzed that **"Sad" or "Unhappy"** feeling was found to be the most dominating emotion (92%), next followed by **annoyance** or **anger** (80%) and the least expression was the "**Anxiety"** feeling (16%) among the working women in their communication process (Fig 3). Identifying the negative emotions can facilitate women to audit their level of emotions at work situations and also try to balance their feelings in boosting the effectiveness in their professional communication context.

Understanding the emotional blocks in the interpersonal process

- Among the fifty women respondents, 20% of them were found to score above 100 and it shows that they can manage their negative emotions and do not allow such feelings to intervene in their relationship with others. A maximum of 48% were found under the second

level and it shows that these respondents sometimes let out their uncontrollable negative emotions into their communication.

Whereas, 28% of them were found under the third level and it shows that they frequently express their emotional feelings in their interaction and 4% of them found to be highly influenced by negative emotions in their interpersonal skills (fig 2).

- Fig 3 shows that 32% Women were found to be impatient to communicate in professional settings and react badly with others. It can be understood that they express their feeling of impatience in terms of gestures, postures or spoken words to their team mates and result in unhealthy interactions. The reasons for their impatience may be work pressure, need for time and preconceived notions.

- The survey reveals that 80% of the respondents are unable to control their anger at work place and thereby create ineffective communication in the form of instructions, nonverbal reactions or poor performance. In case feelings of anger are often expressed to their mates then that can break their relationship with others.

- It was found that unhappiness or sad feelings are commonly faced by women in the current scenario and worries of their personal or social lives can force them to behave badly in formal occasions. 92% of the respondents seem to have worries carried to their working situation and this leaves an impact on their communication styles.

- It can be understood that 28% of them feel frustrated during their conversation and show their emotions towards people around them. Cheerfulness and enthusiasm are found to be lacking among women and they let out their frustrations on others.

- The study shows that 36% of the respondents are frequently suffering from tensions of various kinds and can be understood that they are unable to manage such feelings in social situations. Tensions can cause physical and mental disorders. Women put to stress and

strain can make them tensed but such feelings are to be discharged without disturbing the work.

- Anxiety is another type of emotion found to be prevailing among working women and it may be due to changes in working styles, technological developments, globalization, cultural diversity etc. It shows 16% of them feel that anxieties intervene in their formal communication and tend to develop into poor communicators.

- It can be understood that 24% of women are irritated and also express their irritation in their facial expression, hand gestures, postures or using a strong tone in communication. Irritations can be due to physical, personal or social reasons but it need to be avoided when interacting with others.

- The study shows that 40% of the respondents were revealing their confused state of mind to their superiors, subordinates or people at the same level and hence may be unsuccessful in giving and receiving information. Also their coordination at work place can cause great disorders. Such negative emotions can highly influence their communication pattern in the organization.

- The most commonly found emotions among the women respondents at work is the feeling of "Unhappiness" and this is found to dominate during the interactions. It infers that 92% of them possess sad feelings during their busy working hours and it can certainly hinder the message conveyed and received. They may show disinterest in the topics discussed with their team mates and may also provide incomplete or wrong information to others.

- The sparsely felt emotions at work place was observed to be "anxiety" and may be today women are aware of the changes, develop themselves and try to adapt quickly at work. Hence only 16% of women were found to be having anxiety feeling shown to others during communication.

- Both the levels of emotion and the type of emotion can highly influence the professional women during their formal interactions with the superiors or the peers or the subordinates in the organization.

Managing the emotions for achieving professional excellence

The study reveals the state of emotion to be high, moderate or low for the working women and also implies that out of the negative emotions chosen, "Unhappiness" is the most commonly expressed feelings found among the women respondents in their formal day to day conversations. There are different kinds of worries that disturb the emotionally sensitive women at work place while speaking, discussing or negotiating with others. Reflecting their personal feelings to others leads to interpersonal conflicts and shall damage the work life. As a result, they lose their chance to succeed in their professional lives and are labeled as 'unfriendly', 'Incapable' or 'Inferior' personality.

It can allow them to over-ride other peoples' ideas in working groups too. In such situations, women require a balanced state of mind to identify the emotional state in the working environment and try to change themselves for concealing their worries to others. There are simple remedies suitable to working women for controlling the dominating negative emotions like unhappiness and annoyance –

Short breaks between their sessions or sharing their personal issues with someone of trust or adopting meditative activities or even creating a pleasant environment to work continuously without confrontations. Women are usually appreciated in the society when they are able to communicate effectively with controlled emotions. They turn out to be a role model in their profession with ability to separate personal and social lives and achieve excellence in communication. Once the emotions are disallowed in their actions then they are enabled to take any responsibility at work with optimum satisfaction.

Therefore it is essential for women to develop skills to understand others feelings with utmost faith and try to cope up with their emotional factors in every situation. They can intend to create a mind set to limit the use of negative feelings and adapt suitable strategies in interpersonal communication without affecting others. Self-awareness, Self-realization, Social awareness and Relationship Management are the key components available to any career women to overcome the emotional influence and succeed in the competitive world.

CONCLUSION

Emotions are natural and common to all. However, emotional feelings are acceptable until they do not interrupt our association with others. Only the negative feelings like anger, tension, anxiety etc seem to curtail the interpersonal relationship and especially in a multi-cultural society. Nowadays, women at times find it difficult to control and manage their feelings in a social situation. This may be because of their tendency to balance their personal and professional aspects in the male dominated Indian society. As a result these self-destructive negative emotions tend to hinder the smooth flow of information along the lines of hierarchy and force women to indulge in deferred messages, spread rumors or even miscommunication in the day to day affairs. In due course it allows them to lose their confidence, authority and also the self respect.

The socio-economic reasons like culture, family, environment, etc also seem to cause undue challenges in their work atmosphere and therefore unavoidably express their negative emotions especially the anger or unhappy feelings to influence the speaking styles. Such unmanageable feelings can cause great barriers to job satisfaction, career growth etc and hence professional women need to take sincere steps to realize the dominance of emotions and try to curtail them during their conversations by balancing their emotional levels.

During highly emotional situations women may effectively use the suitable communication technology to convey messages rather than face to face interactions so that work

place confrontations can be avoided. They also need to refine their observation and listening skills to improve their verbal and non verbal forms of communication. Conducting regular personal audit in their communication behavior can help them to establish and monitor adequate soft skills that are essential for their organizational climate.   Optimizing their communication skills shall facilitate women to meet the communication challenges at ease. Optimistic thinking, empathetic speaking and active listening will help them to prolong trust, peace and happiness in their work life.

To conclude, the power of negative emotions among professional women and the adverse effect on their interpersonal skills can be broadly understood through this study. There is also further scope of studying the emotional levels of individuals in different work areas or at various levels of organizations or between the genders for a wholesome research on emotional influences on the interpersonal communication process. Let's join hands to say - "Live and let Live" and never allow emotions to over rule the professional life!

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Service Quality Woes?

Turn to Manufacturing

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Service quality across industries is into a gradual but unstoppable tailspin while manufactured goods get better by the day. The uniqueness of the service characteristics has often been believed to be the "culprit". What is it about manufacturing that so unfailingly delivers on quality and efficiency? Is there a way service companies can learn a thing or two from their manufacturing counterparts? This paper reviews the underlying theory of mass production-line approach and the subsequent developments in manufacturing philosophy to the latest in lean production systems, closely examines their merits and demerits, and proposes the ways in which the best practices from manufacturing can be adopted by service companies with equally magnificent results. The paper also presents illustrations of existing and potential applications of manufacturing logic to services.

Why is it that while, with the passage of time, we get to enjoy better and better products from the manufacturing world – automobiles, computers, mobile phones, cameras, to name a few – the quality of services leaves a lot to be desired? Innumerable customer complaints pending with industry regulators and consumer courts against airlines, banks, credit card companies, insurers, telecom operators, hotels etc. attest to the growing incongruity between customer expectations and service providers' performance. A lot of troubles services marketers so often find themselves in are actually the result of a widely circulated notion that services marketing is unique and hence the traditional principles applied to marketing of manufactured goods are irrelevant. While it's true that the "unique" characteristics of services – intangibility, heterogeneity (variability), perishability, simultaneous production and consumption – render a service provider's job more complex, the core principles of marketing in a service business are no different from those applied in the manufacturing world.

ARE SERVICES REALLY DIFFERENT?

Services are acts, deeds, or performances and hence are intangible. But goods are tangible, or are they? What does a consumer buying an automobile actually buy? Isn't it

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mobility, which is essentially intangible? Isn't a manufacturer obsessed with his automobile rather than mobility termed myopic? Therefore, it is the intangibility of the benefit that holds the key to a marketer's success, no matter what is sold – goods or services.

Services are heterogeneous by virtue of the heterogeneity of the human (employee) behaviour involved in service delivery. Hence services don't lend themselves to standardization whereas goods can be standardized and economies of scale achieved. But isn't it customization rather than standardization that ensures customer satisfaction, especially in an increasingly competitive marketplace? Aren't goods marketers increasingly focusing on offering customized products – from (greeting) cards to computers to cars? The goal of marketing, therefore, is customization – not standardization – regardless of the offering.

Customer involvement makes production and consumption of services inseparable whereas goods are produced first, in the absence of the customer, and are sold and consumed later. But isn't the involvement of customers in product design and development the best way to create value? Isn't "co-creation of customer value" being embraced by marketers of goods as a means of creating and sustaining a competitive advantage in a customer-centred marketing environment? In effect, inseparability contributes to marketing effectiveness while separability hinders the same.

An opportunity to serve a customer (say, a room in a hotel or a seat on an airplane) once lost is lost forever. Hence services cannot be inventoried and sold later whereas manufactured goods can be. However, many goods (for instance, food products) are perishable while some services (such as education, healthcare, financial services and insurance) actually produce long-lasting benefits. Now, aren't goods marketers increasingly moving towards lean production systems characterized by zero inventories or just-in-time production? Isn't it true that inventory represents additional cost and therefore should be eliminated? While services cannot be inventoried, the tangible and intangible capabilities of producing them can certainly be. It is not the ability to inventory but the elimination of inventories that is central to effective marketing.

Now, is services marketing very different than marketing of goods? Does the former warrant unique tools and techniques to enhance a firm's performance? While services marketers have several tools such as the servuction model, service blueprinting, SERVQUAL, SERVPERF, the gaps model of service quality and yield management, the author believes there is a strong case for extending the "manufacturing logic" to services. This paper aims to review the most notable research findings in the area of service quality and efficiency through manufacturing philosophies and take a fresh look at the applicability and desirability of the

manufacturing mindset as a potential tool for salvaging a services sector plagued by mounting customer discontent. The author also provides a few illustrations of existing and possible applications of manufacturing philosophy which offer great promise.

Theodore Levitt, in his seminal HBR article published in 1972, argues that service companies must think of themselves as performing manufacturing functions when it comes to their "service" activities in order to improve the quality and efficiency of service. He goes on to explain that service thinks *humanistically* – where the focus is on the performer of the task rather than the task itself, and the skills and attitudes of the performer are believed to hold the key to quality and efficiency – and that explains its failures. Service employees are expected to "obey" and work "harder" – not demonstrate independent thinking. Manufacturing, on the other hand, thinks *technocratically* – where the focus is on the task itself and solutions to quality and efficiency problems are sought in tools, skills, processes, organizational rearrangements, incentives, controls, and audits – and that explains its successes (Levitt, 1972).

Service efficiency can be improved with the help of hard and/or soft technologies. While hard technologies refer to the substitution of equipment for people and hence are complex and involve significant cost, soft technologies are easier to implement and are more cost-effective in that they entail adoption of technological systems or, newer ways of doing things. While ATMs and vending machines are examples of hard technologies, self service in a supermarket is a soft technology in action.

EFFICIENCY AND VALUE CREATION THROUGH SOFT TECHNOLOGIES

Banks, financial institutions and insurance companies can make effective use of soft technologies by allowing consumers to "build" their products online much like "assembling" a Dell computer/laptop online. A housing loan borrower, for instance, would have the option of visiting the lending company's web site and "playing" with various combinations of interest rate types – fixed, floating – and repayment horizons and down payment quanta to design a product that best fits his/her current and future needs and repayment abilities. This would save the company a lot of precious time which the sales personnel could utilize for "developing" a new market. The customer would have the advantage of an absolutely transparent transaction and more importantly, a truly customized product – all at the press of a few keys! Not to mention the reprieve from the misleading and often-deceitful "financial advisor". It is axiomatic that the so-called financial advisors often promote or, push, the products that maximize their commission-based earnings with little regard to the customers' needs and benefits.

This interactive "customer tool kit" calls for making available on the service company's web site, a vast reservoir of information on currently available basic product features and the corresponding cost implications for the customers, perhaps in a new "build your own (financial) product" section. Thomke and von Hippel (2002) note that product development often involves costly and time-consuming iterations between the supplier and customer since, traditionally, the former has taken on most of the work – and responsibility – of product development. They suggest "customers-as-innovators" approach as a solution, in which a supplier provides customers with tools so that they can design and develop the application-specific part of the product on their own. Since the location of the supplier-customer interface is shifted, and the trial-and-error iterations necessary for product development are now carried out by the customer, rather than the supplier, the speed and effectiveness of product development are greatly improved (Thomke and von Hippel, 2002).

Indeed, co-creation of customer value as illustrated in the previous sections is not a matter of choice anymore since the role of the consumer in the industrial system has changed from isolated to connected, from unaware to informed, and from passive to active (Prahalad and Ramaswamy, 2004).

Managers must attend to the quality of co-creation experiences, not just to the quality of the firm's products and processes. The firm must efficiently innovate "experience environments" that enable a diversity of co-creation experiences. It must build a flexible "experience network" that allows individuals to co-construct and personalize their experiences. Eventually, the roles of the company and the consumer converge toward a unique co-creation experience, or an "experience of one" (Prahalad and Ramaswamy, 2004, pp 5-6).

HARD TECHNOLOGIES AS SUBSTITUTES FOR PEOPLE

Though managers who contemplate substitution of equipment for people to enhance service quality and efficiency have to deal with issues of return on investment and the employee resentment, the efficacy of hard technologies cannot be understated. For instance, airlines struggling to meet consumer demand for prompt service on board with a limited cabin crew could install vending machines that dispense prepacked sandwiches and beverages. Budget hotels employing self check-in systems and coffee/tea/beverages vending machines are not uncommon today. Nor are academic institutions giving online tests thus obviating the need for elaborate arrangements at test centres – physical infrastructure and staff.

In addition to ensuring reliability, promptness and consistency in service delivery, hard technologies offer the promise of putting the customer in control of things, which can greatly

enhance the perceived quality. While attempting to increase customer control over services through deployment of equipment, managers may beware of a caveat – customer preparedness. Let us not forget, technological innovations are invariably greeted by resistance from the uninitiated consumers. Additionally, effective implementation of such initiatives calls for adequate volume of transactions since efficiency in service requires as much investment in plant, land, equipment and promotion as has been historically associated with efficiency in manufacturing (Levitt, 1976).

ADAPT MANUFACTURING LOGIC TO SERVICE – DON'T JUST ADOPT IT

Since adoption of a mass production-line approach brings with it the undesirable element of inflexibility, which severely limits customer choice, it is important to find a "manufacturing system" that would deliver both efficiency and flexibility. The solution lies in lean manufacturing – a system that combines efficient mass production with flexible craft production, thus delivering expanded product variety to customers and expanded product offerings without loss of efficiency to manufacturers (Krafcik, 1998). Elimination of non-value-added tasks through value chain analysis results in improved efficiency much in the same way as a zero defects programme helps boost efficiency by minimizing waste in manufacturing. Another fundamental tenet of lean manufacturing is transfer of problem-solving and decision-making responsibilities from supervisors and quality control departments to individual workers and teams – employee empowerment, that is. Lean manufacturing also emphasizes job rotation and cross-training and supportive personnel policies including profit-sharing, skills training and socialization programmes (Capelli and Rogovsky, 1994).

Bowen and Youngdahl (1998) describe a "lean service system" that focuses on customer involvement in service design, training customers in how to contribute to service quality and training employees in customer service skills and behaviors to achieve the operations goals of internally focused efficiency and customer-defined flexibility. They also note that "lean service companies" try to retain in-house control over the highest value-added activities and outsource the rest of the activities. In a nutshell, the most appropriate "manufacturing system" for service companies is one which lays equal emphasis on both employees (through skills training and empowerment) and customers (through involvement in service design and quality control).

HOW TO TURN CUSTOMER CONTACT INTO AN OPPORTUNITY?

One may question the merit of customer involvement, which is often blamed to be the root of all the service quality evils since it brings in the dreaded uncertainty. Viewed from the "right perspective", this very customer contact can radically transform service quality much to

the delight of both customers and service companies. Firms need to learn how to leverage customer contact through appropriate actions. Customer contact is not inherently bad; it can only help improve quality and efficiency to the extent the nature of the service in question demands customer contact in the first place. Depending on the degree of customer contact, services can be classified into pure services, mixed services and quasi-manufacturing – in the order of decreasing customer contact (Chase, 1978). Naturally then, service companies will be able to profit from customer contact – far from trying to eliminate it entirely – by enhancing contact where required and reducing it where inappropriate (Chase, 1981). Look at the way banking and financial services industries are embracing remote transactions – sample internet banking and mobile banking – through increased application of self-service technologies. Now you can actually obtain a Provisional/Final Income Tax Certificate of your loan by sending a short message to your bank/Housing Finance Company from your mobile phone.

EMPOWERMENT – THE "RIGHT" TOOL?

Turning to employee empowerment, isn't it the "wrong" thing to do in a service "factory", where employee discretion and liberty hinder, rather than contribute to, service efficiency? Or, is it? Empowerment refers to transferring power, information, knowledge and rewards down the hierarchy. Despite arguments to the contrary, empowerment can actually help enhance efficiency if firms know how to demarcate the activities/processes in the value chain that require employee discretion from those that don't. Discretion-banishing reservation systems can coexist with designated customer service areas where empowered employees dole out "customized" personal touch. Luxury hotels where employees are trained to remember and address their regular guests by their first names and act as "friends" rather than "employees" are a case in point.

CONCLUSION

In summary, extension of traditional manufacturing philosophy to service businesses has been impaired by fallacious assumptions about customer expectations from services. Empathy, which is so often glorified to the point of being regarded as pivotal to customer satisfaction in a service business is actually a non-essential where all a customer expects is a fast, accurate, efficient and reliable service. Overemphasizing empathy and courtesy often results in fake smiles on employees' faces – so disgustingly commonplace in our "modern" service establishments. In fact, the so-called differences between services and manufacturing, that have

been traditionally offered as reasons for not transferring manufacturing logic to services, are far less an issue when the focus is on lean, rather than mass, manufacturing (Bowen and Youngdahl, 1998).

Service companies would do well to appreciate the finer nuances of the characteristics of services – apparently distinct but not realistically so – and learn to find the most appropriate ways of transferring the manufacturing logic to design a "service production, or delivery, system" that would meet the "purportedly conflicting" goals of efficient, low-cost production and enhanced product variety and customer satisfaction.

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CONSUMERS SATISFACTION TOWARDS CAR INDUSTRY

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Passenger Car Industry had undergone a drastic change in the Indian Market. Days had gone where the cars are considered as an luxury item. Liberalization had made the foreign players to enter the Indian market. The present study was made to assess the opinion of the customers regarding the passenger car. The factors listed for the study are technology, after sales service, price worthiness, operating efficiency, reliability, safety and comfort pertaining to various manufacturers. The findings of the present study have significant implications for the manufacturers, markets and dealers.

The passenger car industry has been a low priority sector ever since 1947 cars were considered an unaffordable luxury and their production was limited. This was ensured through a host of regulations like licenses to manufacture quantity restrictions on production, high import and excise duties and ban on entry of foreign firms. As a result, the car industry evolved into an oligopoly with three large firms namely Hindustan Motors, Premier Automobiles and Standard Motors. The technology used was never upgraded and the demand remained above supply. Entry of Maruti in 1981 with better technology changed the scenario significantly. Instead of three firms, there was one dominating firm. In this connection demand still exceeded production. The passenger car industry was liberalized along with the other sectors in 1991. Foreign firms were allowed equity participation.

The key success to Maruti has been its management. The objective was to make sure that the company was not only getting its product and technology from Suzuki, but also imbibed the super efficient work culture. The industry started witnessing radical changes in 1990's with deli-censing and liberalization, the industry entered into competitive phase. The Indian law permitted majority ownership for foreign companies entering the industry through a joint venture. The phases of development are new players entered the industry, existing players adopted new strategies, and the industry went through a growth phase.

WIDE CHOICE FOR BUYERS

One of the most visible signs of entry of automobile multi-nationals into India is a hue of multi-coloured cars seen on Indian roads. The multinationals entry led to far-reaching changes in both the manufacturing and marketing of automobiles. The slump in the world automobile industry forced the auto giants to reap the untapped market in India. India and China, with a vast middle class offered excellent opportunities. It was also the time when the world's largest democracy India had decided to liberalise its economy and open its door to foreign investors.

The increased competition changed Indian car market from "sellers market" to "buyers market" and also changed the manufacturer's priorities. Good dealer network, increasing

customer satisfaction, financing customers, better product finish and luxury became the marketing tool to trap the potential customers. During the last 5-6 years, the automobile industry has been extensively liberalized. Sales and production of automobiles have doubled the number of players in the car market. The choice of models in passengers car segment has been almost tripled, the standards of quality, customer expectations, awareness level and dealer service have considerably improved.

Each company is trying to deliver greater value to its customers. As customer delivered value is the difference of total customer value and total customer cost, companies are trying to convince their target market with the best offer to get maximum value for their money. The customer satisfaction level is the person's felt state, resulting from comparing the products actual performance or outcome in relation to the expectations. The buyer's expectations are formed on the basis of the buyer's own past experiences, statements made by friends and relatives, information provided by marketers and competitors and promises made by the seller. The highly satisfied customer becomes the loyal customer and does word-of-mouth publicity for that product, brand and company.

The present study relates to identification and comparing of satisfaction level of customers using the factors like technology, reliability of the car, price worthiness, operations efficiency of the car, after sales services, safety and comfort of the car with various manufacturers like Fiat India, Ford India Ltd., General Motors India, Mahindra & Mahindra, Honda Motors Limited, Hyundai Motors India Limited, Mercedes Benz and Tata Engineering India Limited.

OBJECTIVES

The present study is undertaken to assess the opinion of the customers regarding the passenger car and following were the main objectives (i) to identity the attributes that influence the customers to purchase a car and (ii) to determine the brand opinion related to the attributes that influence the customers.

METHODOLOGY

SAMPLE

Keeping the objectives of the study, non-probability sampling was adopted and the method used to select the consumers for the survey was judgments sampling 500 respondents were chosen for the study.

DATA COLLECTION

A non-disguised structured questionnaire was used to collect the desired information. Framing and sequencing of questions in the questionnaire was done after a pilot study. The factors listed for study are technology, after sales service, price worthiness, operations efficiency, reliability, safety and comfort pertaining to various manufacturers. In additions, respondents were asked to rank the reasons for buying a car.

DATA ANALYSIS

Suitable statistical tools were used to analyse the specific data such as mean scores, weighted averages, ANOVA and Kolmogorov-Smirnov test.

RESULTS AND DISCUSSION

The Indian automobile industry did not emphasized on quality prior to liberalization period. The large number of cars in this segment has increased the choice for the customers like never before. The price sensitive Indian consumers have very low switching costs. The bargaining power has increased over the years, with more choice in number of brands and finance schemes available. Car owners were asked to state the reasons of buying the specific brand. Sight factors like price, features, brand image, power, safety, performance, status symbol and after sales service were stated in the questionnaire and respondents were asked to rank the reasons for buying the car.

Table No: 1

Fiat India Limited		Ford India Limited		General Motors	
Brand Image	2664	Brand Image	2509	Price	2653
Features	2663	Status Symbol	2542	Features	2715
Performance	2791	Fuel economy	2560	Brand Image	2741
Power	2839	Safety	2603	Power	2798
Safety	2869	Performance	2608		

Table No: 2

Mahindra & Mahindra		Honda Siel		Hyundai Motors	
Features	2634	Status Symbol	2501	Price	2613
Performance	2660	Brand Image	2554	Features	2563
Status Symbol	2732	Safety	2573	Safety	2603
Fuel economy	2729	Performance	2635	Performance	2607
Safety	2671	Power	2654	Brand Image	2676

Table No: 3

Maruti		Benz		Telco	
After Sales Service	2613	Status Symbol	2432	Status Symbol	2482
Price	2563	Price	2573	Brand Image	2696
Performance	2603	Features	2586	Safety	2730
Status Symbol	2607	Performance	2592	After Sales Service	2774
Power	2676	Power	2612	Price	2817

Analysis show that customers are having certain perceptions regarding various manufacturers
Fiat India Limited, the pioneer companies in the automobile industry was able to sustain its brand image addressing on the key issues in product development, R & D and product range for future prospects. Aided by an aggressive advertising campaign and continuing good reviews, Ford India Limited is gaining its brand image. Giving importance in innovation in terms of technology, safety and design help to gain the attention of its customers. Moreover it was able to position to appeal to the widest range of potential customers.
General Motors India incorporated in 1994 as a joint venture with the C.K Birla Group of companies, made its presence with new product launches. Owners of General Motors gave price as their first choice for preparing the car. In developed countries, the price of a car forms a fraction of the average per capita income in India. The price of a car is many times the per capita income. The implication is that while in countries abroad the purchase of a car is like that of any other consumable durable, most Indian buyers look at a car purchase like an

investment decision and hence it must be modeled differently. Income and price elasticities would differ considerably due to this fact.

Mahindra & Mahindra has taken decisive steps for integrating the customer focus in its prime functional processes towards achieving the goal of a customer centric organization. Service camps have been organized to educate its customers on the best maintenance practices to minimize the downtime of vehicles. The customers prefer M Mahindra and Mahindra because of its features, performance and fuel economy.

Honda Siel India Limited was incorporated in December 1995 as a joint venture between Honda Motor company Japan and Siel Limited. It is providing latest passenger car models and technologies to the Indian customers. The owners had status symbol for owning the car. Because of its Japanese partnership, it was able to gain its brand image also.

Hyundai Motor India Limited (HMIL) is the second largest and fastest growing car manufacturer in India. HMIL is increasing to expand in line with its positioning as HMIL global expert hub for compact cars. Being Sharuk Khan as the brand ambassador for its company it was able to be in customers minds. The reason for preferring this company car is due to its price, features, safety, performance and brand image.

Maruti Udyog Limited, the largest car selling company in India has many unique service advantages for the customers. The biggest strength of Maruti lies in its vast and strong service Network, around the corner service and low cost of vehicle maintenance.

Telco has become the largest commercial motor vehicle manufacturer in India using a long-term competitive and technology management today. The major town of technology management at Telco has been intensive R & D and concurrent engineering had helped the customers to have strong brand image, safeties, after sales service.

Two way analysis of variance (ANOVA) was conducted to determine if the factors were significant. ANOVA was started because of its robustness and the decrease likelihood of committing a type-II error compared to corresponding nonparametric tests (Fred, 1979, Velleman & Willinson, 1993).

For measuring the level of satisfaction of the brands owned, seven attributes were mentioned in the questionnaire and respondents were asked to rank order these attributes on a scale of 10 in a increased order of satisfaction (ie) 1 for most satisfied and 10 for least satisfied. ANOVA was done to test the significant differences between the car companies and seven attributes. Null hypothesis was set as (a) there is significant difference in satisfaction level among different factors of car (b) there is no significant between the different attributes. The results are as follows.

Table No: 4

Sources of Variance	Sum of Squares	Degrees of freedom	Variance	F-ratio	Critical Value
Between Brands	741854.57	8	741854.57/8	7.449	3.028
Between Factors	-92279.85	6	-92279.55/6	-1.24	3.758
Residual	594444.99	48	594444.99/48		

The value of F Statistics ratio is 7.449. The critical value of F of v1=8 and v2=21 at 5% is 3.758. The calculated value being less than this, hence is not significant. The null hypothesis is true. Thus there is no significant difference between the seven attributes.

Kolmogorov-Smirov test is used to find out whether an empirical distribution agrees with an assumed theoretical one or whether two samples may reasonably be regarded as coming from the same population. Null hypothesis is that the customers do not show any significant towards brand preference. The critical value of Dn is calculated and the calculated value is 1.36/1500=0.06. Hence this test is applied to find out any significant relationship between the various factors while choosing a car from the manufactures and the results are given in table No:6.

Significant and non significant factors for ten companies have been analyzed according to the ranks given by the respondents. The company's were offering several services to customers as well as the purchase are also influenced by several factors. But all companies do not attach same amount of importance to all the factors. The companies were trying to find niches to act so that they can satisfy the customers in a better way. Those niches were analyzed in an ordinal scale to find out, which factors really appreciated by customers. If the customer attaches a significant positive perception over a particular factor them it is considered to be the strength.

Table No: 6

Factors	Fiat		Ford		General		M&M		Honda	
	Dn		Dn		Dn		Dn		Dn	
Technology	0.054	NS	0.054	NS	0.048	NS	0.05	NS	0.058	NS
Reliability	0.064	S	0.064	S	0.052	S	0.048	NS	0.176	S
Price	0.09	S	0.09	S	0.054	S	0.096	S	0.084	S
Operation efficiency	0.084	S	0.084	S	0.06	S	0.042	NS	0.072	S
After sales Service	0.066	S	0.066	S	0.09	S	0.078	S	0.06	NS
Safety	0.068	S	0.068	S	0.072	S	0.066	S	0.054	NS
Comfort	0.068	S	0.068	S	0.06	S	0.068	S	0.068	S

Table No: 7

Factors	Hyundai	Maruti	Benz	Telco

	Dn		Dn		Dn		Dn	
Technology	0.066	NS	0.064	S	0.05	NS	0.072	S
Reliability	0.076	S	0.054	NS	0.054	S	0.078	S
Price	0.078	S	0.07	S	0.076	S	0.054	NS
Operation efficiency	0.094	S	0.054	NS	0.052	S	0.03	NS
After sales Service	0.072	S	0.07	S	0.1	S	0.074	S
Safety	0.86	S	0.052	NS	0.052	S	0.052	NS
Comfort	0.09	S	0.062	S	0.032	S	0.068	S

NS denotes Not Significant, S denotes Significant

Analysis was made to find out whether the factors like technology, price, operations efficiency, after sales service, safety and comfort. In case of Fiat, Ford India Limited, General Motors, Hyundai and Benz all the factors are significant except reliability. Technology, Reliability and operation efficiency are not significant in Mahindra & Mahindra. Honda's significant features are its reliability, price operation efficiency and comfort. Technology, price, after sales service and comfort are significant features in Maruti cars. Telco is having Technology and Reliability, after sales service and comfort as significant factors.

SUGGESTION AND CONCLUSION

Once a need has been recognized, the consumer must next identify the alternatives (ie) the choices before them. Typically alternative cars are being identified first and then alternative brands of cars are identified. Type of car and brand identification may range from a simple memory scan of previous experiences to an extensive external search. The search for alternatives is influence by past experiences with the brand already own, confidence in the information given by dealers and expected value of additional information from various informal sources is perceived to be work in future purchase. Differentiation strategies are alternative whenever buyers needs and preferences are too diverse to be fully satisfied by sellers with identical capabilities. The core concept behind this is the essence of a broad differentiation strategy is to be unique in ways that are valuable to a wide range of customers.

When a satisfactory number of alternatives have been identified, the consumer evaluates them before making final decision. The evaluation may involve a single criterion or several criteria against the alternative considered. Dealers should monitor consumers to determine what choice criteria they use to identify any changes that may be taking place in this criteria or priorities and to correct any unfavorable misperception.

The findings of the present study have significant implications for the manufacturers, markets and dealers. Advertisers can also identify the areas and attributes for marketing their strategies more effective for promoting the manufacturer. Companies must try to create delighted customers who ultimately will become the spokesperson of their company. This along with continuous inputs from an aggressive marketing strategy and a revamped and energetic supply system will give the system a sustainable competitive advantage in terms of introducing new products faster at a lower cost, targeted at a particular customer segment.

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DEVELOPING SKILLED EXECUTIVES THROUGH VARIOUS MBA PROGRAMME: A STUDY ON PRIVATE UNIVERSITIES IN BANGLADESH

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After the liberty, Bangladeshi Economy has moved towards industrialized based. Bangladesh had also adopted open economy by the grace of heavy tide of globalization. Consequently, competition of the domestic and foreign industrialized market, organizations need skilled management which highlight on the development of management education and the need for suitable managerial, leadership, administrative and decision making skills. This could support TQM as both a valuable tool and a fad. By getting a MBA degree from an institution, an executive can handle the total wants of an organization. There are lots of MBA program giving through private and public institutions. This study is fully focused on the various MBA programs, which can keep a vital contribution to build a skilled executive after that who can handle the things properly in the organization.

Keyword: Executive, MBA, Bangladesh

The education of executives for corporate, business, government and administration work has been achieved through the Masters of Business Administration (MBA). The relationship of education like MBA in general to the more narrow concepts of development, training, and learning. Education is the broadest instruction concept and learning is the most specific of these instructional processes, with development and training falling between these two extremes (Sikula A. F, 1976). Skilled executives are considered of as "the total knowledge, skills, creative abilities, talents, and aptitudes of an organizations work force, as well as the values and attitudes of an individual involved. The last two decades have meant a substantial increase in consciousness in relation to the value of skilled executives or skilled human resource management (HRM) in corporate sector. This is reflected as growing expectations for the impact, which people-related activities can make on business performance. There is a consensus that the quality of the education system is deteriorating. This deteriorating is evidenced by declining test scores, graduate with inadequate basic skills, increasing dropout rates and widening gap between industry needs and student capabilities (Fisher, 1993, schargel, 1993). With the growing authenticity of the MBA approach, the first wave of organizational change agendas gathered force through the 1990s and 2000s, under the excuse of improved competitiveness in the domestic and global market, setting the scene for pressure to be put

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on organizations to invest significantly in Human Resource Development. Still largely driven by MBA thinking that impacted on how organizations provided change leadership to their managers and workers, through training programs offered through universities, and increasingly through external consultancies and in-house Learning and Development units. There was some differentiation between worker education and manager education but overall, education and training is predominantly designed to improve the technical and administrative capacities of people in order to do their jobs better. The impact of this thinking had a homogenizing effect, driven by the share holder profit motive of large multinational corporations. Many organization leaders, organizational theorists, and training practitioners wanted to argue that different nations had different cultures and that it is necessary to make organizational development locally meaningful to people. There is also a concerted push to convince senior corporate leaders and managers of the need for them to create learning organizations in order to survive the pressures of globalization.

RATIONALE OF THE STUDY

Corporate sector is trying to develop his managers or executives to compete in local and international market arena. Education is the only main root of developing executives as well as skilled human resource. Governmental and non-Governmental education institutes can keep such a vital role by giving proper and realistic oriented education for the sake of human resource development of the country. In such context academicians, researchers, Government, decision makers and others planners and administrators recognize human resource as the most and only vital and complex factor to the development of Bangladeshi corporate sectors. That is why, Bangladeshi corporate company's needs to develop its human resources through proper education like business education (MBA), technical education, technical training, vocational training and other training programs. Here the private universities in Bangladesh are keeping very worthier contribution for building executives by giving different types of MBA program like MBA in Management, Marketing, Finance, Accounting, MIS, Advertising, Brand Marketing, Shipping Management, Hospital Management, Insurance, etc. This is why researchers' feels to do some research on it and do study about the MBA programs that are involving to develop executives in Bangladesh. This research will add some value and fill up the gap that motivated the authors to undertake such a study.

OBJECTIVES OF THE STUDY
1. To explore the different MBA programs in Bangladesh.
2. To find the lacking of those MBA programs in Bangladesh
3. To give suggestions concerning of upgrading the MBA programs

SCOPE AND METHODOLOGIES OF THE STUDY

The study covers 5 private universities situated mainly commercial capital city Chittagong in Bangladesh. Some of the samples are also situated in capital Dhaka in Bangladesh. In total 100 respondents, including faculty members have been interviewed during the study period. The proposed study was exploratory and empirical one. Both Primary and secondary data have been used in this study. The secondary data would collect from various books, reference Journal, and articles. Necessary information and data have been collected from sample respondents through the direct interview method by using structured questionnaire, university authority and the sample MBA students. In addition, review all the websites of respected institutions for updated information. In the other hand, the researchers have also reviewed several foreign research works.

LIMITATIONS OF THE STUDY

The study covered very limited number of sample educational organization in respect of its real scope all over the country. There is no plethora research work in this field. Sometimes responded were not interested to express to their honest opinion. To overcome these limitations, an extensive study of existing foreign literature, journal, and relevant publication in this field was done by the researchers. This is fully self-financed research work that is why the researchers could not able to cover wider area.

TRADITIONAL MANAGEMENT EDUCATION

The education of managers for corporate, business, government and administration work has been achieved through the Masters of Business Administration (MBA). The historical development of the MBA and its capacity to become a truly globally recognized qualification offers fascinating insight into the world of business and administration, and its significant impact on transformational organizational development. With the growing authenticity of the MBA approach, the first wave of organizational change agendas gathered momentum through the 1990s and 2000s, under the appearance of improved competitiveness in the domestic and international market, setting the picture for pressure to be put on organizations to invest significantly in Human Resource Development. MBA thinking is basically driven by organizations provided because of modify leadership to their managers and workers, through training programs offered through universities, and increasingly through external consultancies and in-house Learning and Development units. There are some differentiation between worker education and manager education but overall, education and training was predominantly designed to improve the technical and administrative capacities of people in

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order to do their jobs better. Many organization leaders, organizational theorists, and training practitioners sought to argue that different nations had different cultures and that it is necessary to make organizational development locally meaningful to people and also a concerted push to convince senior corporate leaders and managers of the need for them to create learning organizations in order to survive the pressures of globalization. The author identifies a new phase of organizational development that is going through by taking MBA discourse. Senior and middle-level managers in the corporate, government and education sectors, and also work undertaken as an academic in a faculty of Education delivering Masters level qualifications in Organizational Leadership, and examines what the contribution of Education might be to future organizational development.

IDENTIFYING THE GAP BETWEEN TRADITIONAL AND FUTURE MBA

In Bangladesh, MBA program has got popularity after acquiring capitalism. Because after having capitalist market corporate world in Bangladesh have flourished and they have needed lots of executives for adjusting domestic competition and international pressure. While management education like MBA has become adept at skilling managers to survive domestic and global change, there has been significantly less focus on the executive learning principles that would enable managers to understand what global and domestic business challenge or change is about, to control the opportunities created by this change-driven environment, and to be able to anticipate transform in a way that allows for entrepreneurship and innovation. Management education like MBAs has tended to be conducted through the lens of business drivers: profit, administrative expediency, market competitiveness, focusing new markets, developing core competencies and find out competitive advantages rather than competitive firm for sustain in the market. There is emerging recognition that the leaders and managers of organizations need to deliver calculable return on investment for their own development as much as for the development of their staff. All MBA program is related on performance because every MBA program has to develop the total skills and performance level of the executives.

BUSINESS SCHOOLS UNDER THE PRIVATE UNIVERSITIES

There are 17 state universities and 51 Private universities who are working inflexibly for developing human resources through technical, business, social science, literature and others specific purpose oriented educational programs. But last 25 years business education get top choices from the student demand view because of market demand. That is why most of the private and public universities have business faculty including having different MBA program for the sake of executive

and fresh executive development in the domestic and international corporate sectors. Here is some types of institutions those who are specialized for their own specified service like BBA, MBA, Executive MBA in Insurance Management, International Business, Company MBA, Pharmacy Management, Library Science, economics, accounting, finance, marketing, management, banking, HR management, MIS, entrepreneurship development, specific training and integrated educational module given by the university authority. Business schools under the various universities in the country have available seats for giving MBA in various dimensions.

EFFECTIVE EXECUTIVE PLAN THROUGH MBA

Figure 1 show that by giving proper education through MBA, managers or organizational employee can improve themselves skilled human resource into efficient and effective human resource who will keep good contributions for the betterment of the particular organization. The left side of the figure shows six things including Objective set by organization, Executive need assessment, Educational Infrastructure, Executives Demand forecast, Existing Executives and Motivation for various sectors which are very vital for assessing realities of executives for the organization. Then educational institutions have to build educational infrastructure for Giving Better Education, Giving Better Trainings, Giving audio-visual interactive education, Inform the scope of building or upgrading career to employee of the organization for the sake of build them as skilled executives. In this way, input of organizational employee covert as skilled executive.

EDUCATION SYSTEM POSITIONING STRATEGIES

Based on the above skills, a strategic view for meeting the market requirements should be the focus of the decision maker. These strategies should be based on the principle of market-oriented education.

EDUCATION POSITIONING STRATEGIES

The main idea under business education positioning strategy should be to identify some major potential areas where the graduates are going to work so that we can position our business education in a way to impart the relevant skills for those areas (see Figure 3). These areas can be classified under industrial, Sectoral, functional, or hierarchical categories: not only makes them creative at the workplace but also helps them to adapt to the new work environment faster.

| Objective set by organization |

| Appointment |

| Executives Supply to the corporate market |

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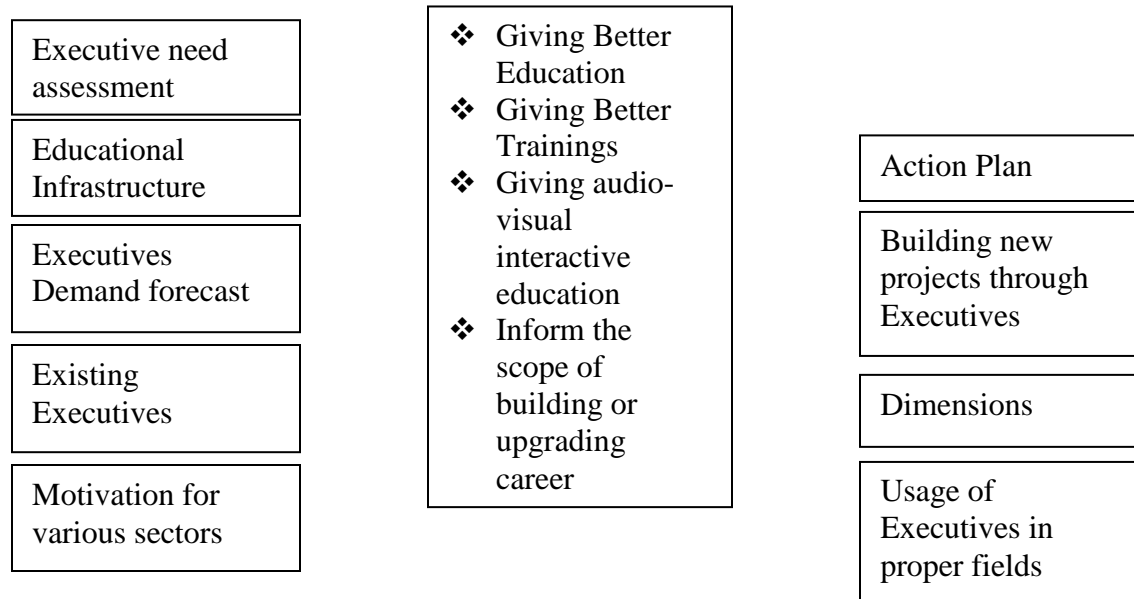|		
Executive need assessment	❖ Giving Better Education ❖ Giving Better Trainings ❖ Giving audio-visual interactive education ❖ Inform the scope of building or upgrading career	Action Plan
Educational Infrastructure		Building new projects through Executives
Executives Demand forecast		
Existing Executives		Dimensions
Motivation for various sectors		Usage of Executives in proper fields

Figure: Executives development through MBA

Industrial

An industrial-based categorization will indicate whether the graduates are likely to serve petroleum, consumer products, electronics, and electrical or aerospace industry etc.

Sectoral

A Sectoral categorization will indicate whether the graduates are likely to work in manufacturing or service sector.

Functional

The potential areas can be identified based on the functions performed, e.g. whether the graduates are likely to work in production, materials, quality assurance, project management and maintenance, etc.

Hierarchical

This categorization will tell whether the graduates are likely to work as professionals, supervisors, middle management and top management.

<div align="center">

RESULTS

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Appendix is containing seven tables and three figures. Table 1 show Escalating Executives required skills through MBA programs by private universities in Bangladesh. It is evident that most of the skills and performance growing program is undertaking the institutions. Table 2 show the Topics that Executive find comfortable and Uncomfortable. Table 3 shows MBA Admission trend in different universities in Chittagong, Bangladesh. Here Bankers and other private companies

executive have great intension to do MBA. Table 4 shows Emphasis given by educational Institutions for the betterment of human resource; here every institution is emphasizing business education like BBA & MBA. Table 5 shows The Most demanded Teaching methods for Trainer, here the understanding and presentation method is most popular teaching methods for the students. Table 6 shows Opinion of the respondents towards Instructor or Trainer efficiency by calculating through Likert scale and the efficiency level is moderate. Table 7 shows Trends of Choices the Courses by potential students, here business education is well headed rather other choices. In the other hand, figure 1 shows Executives development through MBA, figure 2 shows Flow of MBA student from different pattern of companies and figure 3 shows that Education System Positioning Strategies are very much core offerings.

PROBLEMS OF EDUCATIONAL INSTITUTIONS TO DEVELOP EXECUTIVES
From the previous literature study and our study, the major problems of developing executives in Bangladesh through private universities may be identified as follows:-

Lack of infrastructure
The institutions may offer a good, descent course, or training, which might have great potentials in the practical job field, but the problem is, the way, they have to learn the student, they cannot give them these sorts of facilities to develop them as a skilled executive.

Lack of Quality education
There are so many universities which are not maintaining and ensuring satisfactory level of quality of education in the context of standardizes syllabus designing. They do not even provide them quality teachers or instructor, quality-teaching materials and other things.

Lack of Co-ordination within the institutions
Executives' development activities through educational institution by giving various are not well coordinated. There is no coordination among the university grant commission and the mentioned university for the sake of maintaining standardizes education. The different methodologies are using different level. Even quality, syllabus structure, teaching methodologies, styles, facilities for same courses or topics differ from institution to institutions.

Lack of investment
Both the government and private sector invest too little in this purpose. All the planning for executive development is handicapped by the scarcity of funds and financing.

Lack of trained instructor

To develop executives, there should ensure the supply of trained trainer. Availability of experienced, efficient, and trained instructor or teacher is a rarity in Bangladesh. On the other hand, hired instructor is too costly to implement.

RECOMMENDATIONS FOR EXECUTIVE DEVELOPMENT THROUGH VARIOUS MBA PROGRAMS

Government initiatives

To develop executives to compete locally and globally; government has to take major step like create institutions, increasing infrastructure and financing. And give the clear picture of scope of opportunities for recruitment. Government has to motivate his people to come up for better training and education.

Make more institutions and training centre

At the moment, the institutes for educational, technical, professional, vocational, and other specialized training institutions are too limited to the overall demand or need in Bangladesh. That is why; every agency like government, non-governmental organization should come up to build the new institutions which can able to build efficient executives by giving practical oriented training.

To recruit professional trainer

To generate the commendable flow of skilled executive to the corporate sector, professional trainer is mandatory for all university. Professional trainer and capable trainer should offer due to give proper education, training, and motivations and all harmful brain drainage.

To create employment opportunities and recruitment

After establishing HRD institutes or invest to the HRD institutes, Govt. and NGO should aware of creating new job and field. The quantity and quality of education and training largely determine the kind of persons available for recruitment into the services. The agencies should clarify the area of employment opportunities and ensure the recruitment.

Modern technological equipment

The institutes should ensure modern equipments in such organizations. It has to maintain scientific education through modern technologies.

FINAL COMMENTS

The role of institutions for developing executives is massive. It is crucial for any economy in the world. Country like Bangladesh has tremendous emergence to develop his executives into efficient and effectively basis for the domestic and foreign market. It is one of the substitutes in connection with the development of Bangladesh. There is extraordinary competition in free market economy. Everybody compete with their efficient human resource and increase their productivity, innovation of new products, ensures quality assurance and create market forces through efficient human resource. Moreover, efficient human resources create from a good institution. So human resource development through good institutions should be given the top most preference in the development process of Bangladesh along the line discussed in this paper. It is hoped that the business education like various types of MBAs will keep impart by the private universities which will flourish day by day in Bangladesh.

APPENDICES

Table 1 Escalating Executives required skills through MBA programs by private universities in Bangladesh.

Skills / Knowledge	Response	Skills / Knowledge	Response
• Administrative Knowledge	Yes	• Entrepreneurial skills	Yes
• Interpersonal Skills	No	• Technical Skills	No
• Self-directed work	Yes	• Writing Skills	Yes
• High levels of skill training	No	• Presentation skills	Yes
• Problem-solving	Yes	• Fluent speaking ability	Yes
• Encouragement of innovation		• Marketing Knowledge	Yes
• Total quality management procedures and processes	Yes	• Finance and Accounting related Knowledge	Yes
• Employee attitude	No	• Creative behavior	No
• International Business Knowledge	Yes	• Strategy developing knowledge	Yes
• Purpose oriented Skills	Yes	• Marketing Research Knowledge	Yes

Source: Field Survey

Table 2: Topics that Executive find comfortable and Uncomfortable

Topics Managers Find Comfortable to Discuss	Topics Managers Find Uncomfortable to Discuss
• Assignments	• Presentation
• Goals and strategies	• Challenges and criticism
• Discussions	• Create Proposal
• Management processes	• Controversial practices
• Organization of work	• Personal issues
• Performance review	• Senior management
• Case Method	

Table 3: MBA Admission trend in different universities in Chittagong, Bangladesh

University	Program	Total No.	Male	Female	Profession				
					Bankers	Govt.	Private	Business	Others
University of Science & Technology Chittagong	MBA (Regular)	100	80	20	10	20	55	10	5
	MBA (Executive)	40	35	5	5	15	10	4	6
	MBA (International Business)	30	28	2	4	5	11	6	4
	MBM	90	75	15	70	3	10	4	3
International Islamic University	MBA (Regular)	140	100	4	-	-	10	15	115
	MBA (Executive)	130	130	-	30	25	45	20	10
Preston University (Southern)	MBA (Executive)	25	22	3	12	4	4	3	2
Royal Roads University	MBA	100	85	15	20	20	35	10	15

[Source: Field Survey]

Table 4 Emphasis given by educational Institutions for the betterment of human resource

Course Name	Institute
Professional Education	16
Business Education	45
Science Education	31
Social Science	35
Vocational Training	19
Purpose Oriented Education & Training	21

[Source: Web site & Field Survey]

Table 5 The Most demanded Teaching methods for Trainer

Method	No. of Respondents	Percentage
Understanding or Script Lecture	100	27%
Case Method Lecture	100	15%
Review & Updated Lecture	100	07%
Presentation Method	100	23%
Practical organization Field Work Method	100	17%
Others	100	11%

[Source: Field Survey conducted over 100 MBA students]

Table 6 Opinion of the respondents towards Instructor or Trainer efficiency

Variables	Average Score
❖ Clearing Thinking	2.0
❖ Resourcefulness	1.5
❖ Patience, tolerance and good humor	1.5
❖ Presentation Skills	1.0
❖ Flexibility	2.0
❖ Facilitation	2.0
❖ Confidence	1.5
Average	1.64

Table-7 shows that the aggregate overall score as per opinion of the respondents based on seven sub variables is 1.64 indicating nearer to moderate efficiency of the system.

Table 7 Trends of Choices the Courses by potential students

Course Name	Percentage
Professional Education	09.00%
Business Education	54.00%
Science & IT Education	20.00%
Social Science	9.00%
Others	8.00%
	100.00%

[Source: Field Survey conducted over 100 Students]

Figure 2: Flow of MBA student from different pattern of companies
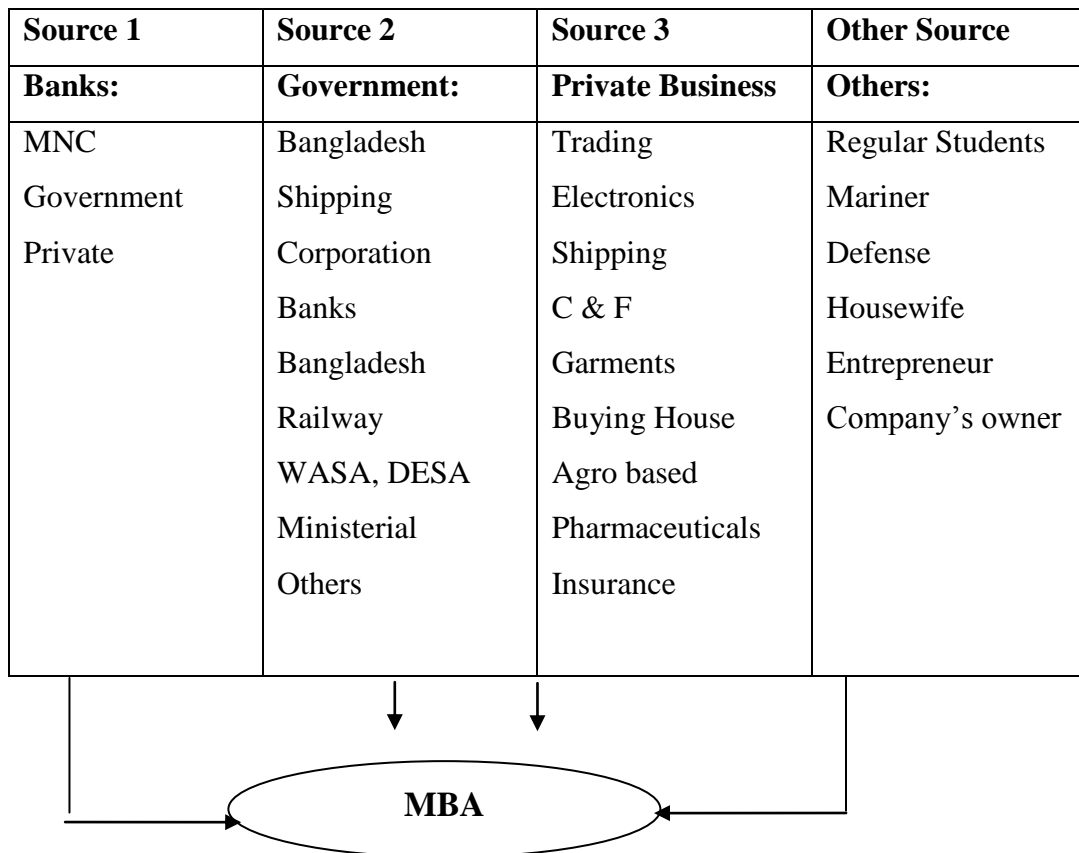
Source 1	Source 2	Source 3	Other Source
Banks:	**Government:**	**Private Business**	**Others:**
MNC	Bangladesh	Trading	Regular Students
Government	Shipping	Electronics	Mariner
Private	Corporation	Shipping	Defense
	Banks	C & F	Housewife
	Bangladesh	Garments	Entrepreneur
	Railway	Buying House	Company's owner
	WASA, DESA	Agro based	
	Ministerial	Pharmaceuticals	
	Others	Insurance	

MBA

Figure 3 : Education System Positioning Strategies

Strategy: More Core Offerings		
	Strategy: More Major Offerings	
		Strategy: More Elective Offerings

Volume →

Variation on Skills

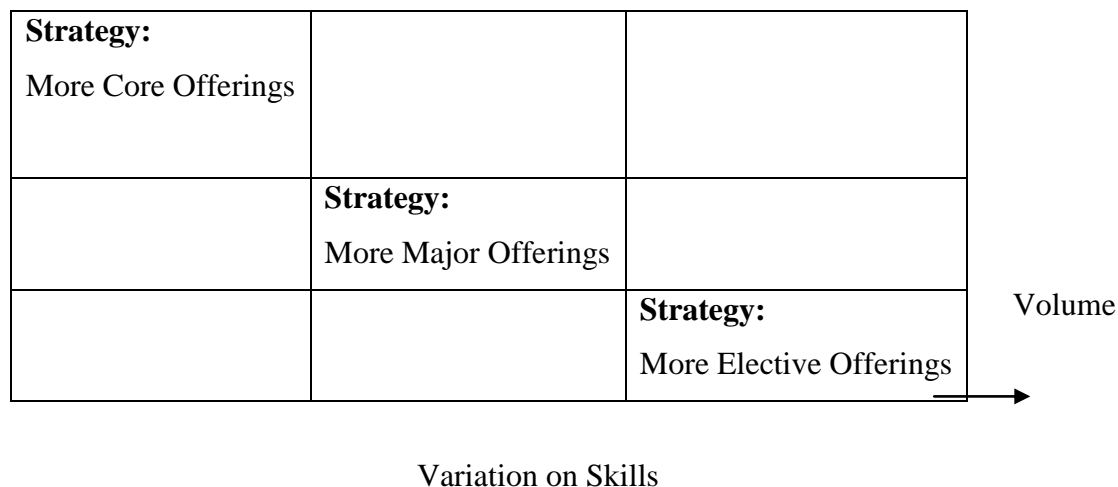Figure 2: Education positioning strategies

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Credit Derivative: An immense Potential Instrument in Indian OTC Derivative Market

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The purpose of this study is to highlight the economic impact of credit derivatives, a new financial product for credit risk transfer, in the Indian banking sector. Credit derivatives, these days, have become the popular financial instruments all over the world as a result of increasing debt defaults in the financial markets. Undoubtedly, credit risks have considerably increased in the banking sector over the last few years; as a result, the market of credit derivatives has achieved a thrust at an incredible pace. At present, the Indian banking sector is burdened with high NPAs, which may be likely to accrue in the future as well. Thus, there is an earnest requirement for credit protection in the banking sector.

Credit derivative is an innovative market model in the field of financial derivatives. Generally credit derivatives are OTC transactions. They are comparable to an insurance cover, which assures repayment of dues to the lender if the borrower defaults. Credit derivative is a mutual contract that comprises of two parties. One is the credit risk protection buyer and the other is credit risk protection seller. Credit derivatives are used as a substitute to cash market investment, as an well-organized risk management tool and an efficient means to arbitrage different prices among different assets. The credit derivatives can abolish the credit risk in a more efficient way as compared to usual techniques like unfunded sub-participation insurance, financial guarantees, letter of credits, etc.

Three most important credit derivatives are – Credit Default Swap (CDS), Total-Rate-Of-Return Swaps (TRORS), Credit-Spread Put Options and Credit-linked Note (CLN). Credit Default Swap is by far the most admired and commonly used derivative, which captures almost 85% of the market for credit derivatives.

Credit derivative instruments provide a lot of benefits and at the same time have related risks as well. While these instruments help the market in respect of efficient allocation of capital, sharing of risks, provision of flexibility in developing a target risk portfolio, they also have associated risks like credit risk, estimation risks, systematic risk, liquidity risk, accounting and disclosure risk. For this, operational guidelines should be framed which can be done under the auspices of banks hedging their risks.

CREDIT DEFAULT SWAP

A Credit Default Swap is described as a confidentially negotiated contract in which one party, generally identified as the protection buyer (or risk shedder in the parlance of the BIS) gives a fee premium to another party, usually referred to as the protection seller (risk taker) to

save himself against the loss that may be incurred on his exposure to an individual loan or bond as an effect of an unexpected growth. This growth is generally referred to as a 'credit event' specifying that the borrower (known as the reference entity) on which the Credit Default Swap has been put in writing is incapable (or is likely to become incapable) to repay its debt. The Credit Default Swap markets allow for splitting of risk and redistributing it among various participants in the market. Commercial banks use Credit Default Swaps to manage the credit risk while lending large loans to corporate. The diagram 1 below shows the operational mechanism of a Credit Default Swap.
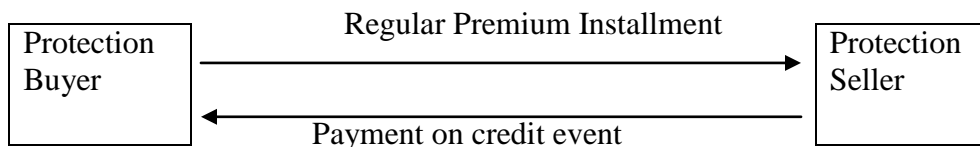
| Protection Buyer | Regular Premium Installment →
 ← Payment on credit event | Protection Seller |

Diagram 1

TOTAL-RATE-OF-RETURN SWAP (TRORS)

As the name indicates a Total-Rate-Of-Return Swap relocates the risk and return on an underlying reference asset from one party to another party. It is a modified off-balance sheet transaction that allows the relocation of the entire financial programme of a particular asset or portfolio of assets by the buyer of protection in exchange of fixed or floating interest payments. The diagram 2 gives an idea about the operational mechanism of a Total-Rate-Of-Return Swap.
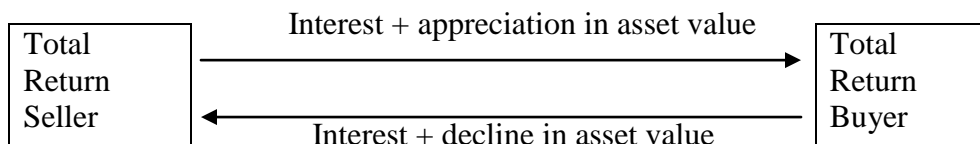
| Total Return Seller | Interest + appreciation in asset value →
 ← Interest + decline in asset value | Total Return Buyer |

Diagram 2

CREDIT-SPREAD PUT OPTION

A Credit-Spread Put option is an agreement that segregates and confines devaluations in a reference asset that are free of changes in the yield curve. Basically they are default swaps that specify spread widening as an event. The spread is basically computed as the yield differential between the risky (reference) bond and a risk-free govt. bond (or an interest rate swap) of the same maturity. The diagram 3 demonstrates the operational mechanism of a Credit-Spread Put Option.
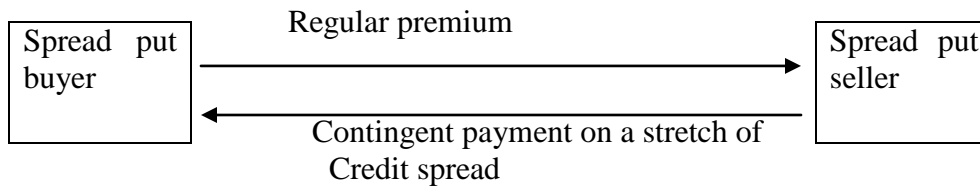
demonstrate

2

```
┌──────────────┐        Regular premium              ┌──────────────┐
│ Spread  put  │ ─────────────────────────────────▶ │ Spread  put  │
│ buyer        │ ◀───────────────────────────────── │ seller       │
└──────────────┘    Contingent payment on a stretch of └──────────────┘
                         Credit spread
```

Diagram 3

CREDIT-LINKED NOTE (CLN)

The Credit-linked-Note allows the investor to purchase an asset with a return linked to the credit risk of the asset itself and extra credit risk transferred by way of credit derivative between the parties. So, it is an amalgamation of a regular note (bond or deposit or asset) and a credit option. Being a regular note with coupon, maturity and redemption, it is an on-balance sheet mechanism just like Credit Default Swap. The diagram 4 displays the operational system of a Credit-Linked Note.
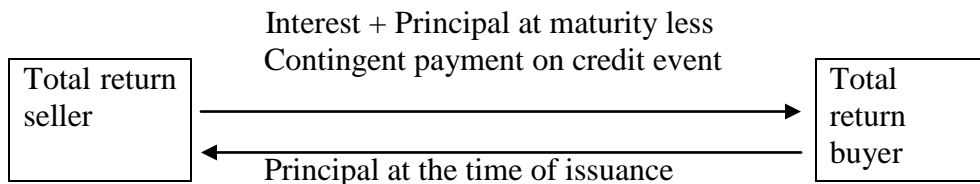
```
                       Interest + Principal at maturity less
                       Contingent payment on credit event
┌──────────────┐                                        ┌──────────────┐
│ Total return │ ─────────────────────────────────────▶ │ Total        │
│ seller       │ ◀───────────────────────────────────── │ return       │
└──────────────┘    Principal at the time of issuance    │ buyer        │
                                                         └──────────────┘
```

Diagram 4

SIZE OF A CREDIT DEFAULT SWAP

Even if there are no specific perimeters on the size of a Credit Default Swap contracts which have varied in size from a few million to several billions of dollars, by and large, the agreements are focused in the $10 to $ 20 million range with maturities of between one year and ten years. The most regular agreements are of five-year maturity

ADVANTAGES OF CREDIT DERIVATIVES

1) Credit Derivatives allow the banks and institutions to shift credit risk, and therefore free up capital, which can be utilized in prolific opportunities.
2) Through various credit derivatives the banks and financial institutions can contract and handle a credit risk portfolio on their own preference and risk appetite limited by sales efforts funds and distribution.
3) The banks and financial institutions can diversify credit risk with the help of credit derivative mechanism to other participants of the financial markets.
4) The high technology-oriented corporate units having a substantial number of consumers can also take advantage of credit derivatives.
5) As credit derivatives transfer credit risk, credit spreads may be constricted, as illiquidity is no longer a major risk.

CREDIT EVENTS

The fortification from credit risk regarding reference asset is arisen due to various reasons, which are known as credit events. The International Swaps and Derivatives Association (ISDA) have described six credit events. These are-bankruptcy, failure to pay, obligation default, obligation acceleration, repudiation/moratorium, restructuring.

Bankruptcy: It arises when a company is in debt or unable to make payments for its debts.

Failure to pay: After the end of any applicable grace period, failure on the part of the reference entity to make payments when outstanding under one or more of its compulsions.

Restructuring: Restructuring is one of the litigious credit events in the credit derivatives market and it is most related in the situation of hedging loans rather than bonds. Restructuring has been regarded as the trickiest of all the credit events initially outlined by ISDA.

Repudiation/Moratorium: It points out the condition where the reference entity or a govt. entity disaffirms, confronts, renounces or discards the validity of one or more of its compulsions, or if the entity or govt. stops or defers payments on such compulsion. Sovereign reference entities are only permitted to this prerequisite.

Obligation acceleration: This credit event covers the circumstances, other than non-payment, where the associated compulsion becomes outstanding and due.

Obligation Default: Obligation default occurs when the lender proclaims the borrower in breach of payment terms and claims return of the principal. Obligation default specifies one or further compulsions in a collective amount of not a smaller amount than the default requisite have become capable of being declared outstanding and to be paid before they would otherwise have been due and payable as a result of the incidence of a default event other than a failure to make any required payment in respect of a reference entity under single or added compulsions.

PROSPECTIVE RISKS OF CREDIT DERIVATIVES

The largest risk arising by using credit derivatives is operational risk. Operational risk means that risk which traders could indiscreetly use any credit derivative instrument instead of hedging for speculation purpose. Example-Barings PLC, a British Investment Bank was closed due to the losses from unwarranted derivatives-related trading and the Orange County, California defaulted in this case. As operational risk can be large, it can be controlled without much effort. Thorough internal control system can prevent traders from engaging in any inappropriate actions.

A second type of risk is counterparty risk. It indicates that type of risk when the counterparty to a transaction will fail to make payment. Though counterparty risk is an issue of concern, the degree of this risk is comparatively small. To incur a loss from a counterparty default, a firm must face the following events: the counterparty must default, the counterparty must have a loan on the credit derivatives transaction and the loss must be larger than can be absorbed by the mediator to the transaction. Still the possibility that the mediator cannot take up the loss is negligible. The mediators either are apex commercial banks or the AAA rated subsidiaries of investment banks. Both organizations are well capitalized and cautiously dodge the risk of their deal.

A third type of risk is liquidity risk. When there is an uncertainty regarding selling or counteracting a previously established point, liquidity risk arises there. Liquidity risk is

comparatively insignificant for the firms, which hold credit derivatives stringently for hedging purpose. If we take an example of a bond issuer who uses a credit option to hedge its upcoming costs of borrowing, the issuer of bond will just hold the option in anticipation of its expiry. In contrast, liquidity risk is a significant consideration for issuers of credit derivatives and for those who use credit derivatives and expect offsetting their situation before the contract matures. Presently liquidity risk is soaring because there is no active secondary market for members to evade their credit risk exposure or to balance a formerly established position. As the market becomes more active, this risk will reduce.

Credit derivative users face another risk, which is legal risk. Legal risk is the risk that a derivative contract may be deemed illegitimate or inapt. The Orange County bankruptcy is an example of legal risk. For quite a few years, the Orange County effectively invested in unsafe, fixed-income derivative securities. An unexpected and huge change in interest rates is the reason of a sudden decline, which makes the Orange County incapable of meeting margin calls. In the swirl of the bankruptcy, the Orange County took legal action against the investment bank, which sold them the securities. The Orange County alleged that it was illegitimate for it to hold such securities; as a result, the derivative securities were unenforceable deal. The matter is currently being resolved in the courts. If the courts be of the same opinion with the Orange County, the possibility will enhance that the losing parties on other derivative transactions will seek legal help to stay away from fulfilling their derivative contracts. Such a development will strictly curb the expansion in the credit derivatives market.

REGULATORY ISSUES

The users of credit derivatives face another doubt, which is their regulatory status. What should be the treatment of credit derivatives-as securities, as commodities, as swaps or as insurance products? This difference is significant as these contracts are regulated by various agencies and under various terms. Example-swaps are regulated by The Commodities Futures Trading Commission. Assume that a firm goes into a Credit Default Swap contract. If there is a variation in the regulatory status and the contract is subsequently considered as a security, it would then be under the influence of the Securities and Exchange Commission. As SEC regulations need additional disclosure, the contract could be considered illegitimate. A modification in regulatory status could therefore possibly cancel formerly created credit derivative transaction.

One more regulatory issue is capital requirement for credit derivatives. Bank may discover that hedging credit risk, in fact, raise their capital requirements. Assume that a bank makes use of a credit derivative to put up a long-term hedge for the credit risk of a large borrower. The credit derivative trims down the risk of the bank, but under existing risk-based capital standards there is no recognition of the lower risk. Not merely is there no decline in the bank's capital requirement for the loan, but the bank must set aside extra capital to cover against counterparty default. As credit derivatives become more accessible, regulators will require reviewing the state of affairs under which credit derivatives can lessen a bank's capital requirements. If regulators permit practically configured credit hedges to cut capital charges, banks will have a strong reason to take up such hedges, which would reduce their credit risk and let them to make further loans.

THE GLOBAL GROWTH OF CREDIT DERIVATIVES MARKET

The development of the global credit derivatives market has surpassed the anticipations from the 2004 BBA survey, which envisaged a market size $8.2 trillion by 2006. The volume of the market was $20 trillion at the end of the 2006. The compounded annual growth rate (CAGR) for the last ten years is 48% and it is expected that the similar rate of growth will continue in the coming years.

Banks now think that the global credit derivatives market is expected to be inflated to $33 trillion at the end of 2008. Further if we extrapolate the data for estimating the future growth of world-wide credit derivative market, it is showing an enormous growth. The expected credit derivative market at the end of 2010 will be some what like $72 trillion and by the end of 2015 it would be nearly $350 trillion. This development is supposed to be maintained. It is not just the volume of the market that has continued to develop but also the variety of products. The growth of index trades, tranched index trades and equity-linked products-to emphasize but a few-have constructed a unique variety of traded products in the credit derivatives market.

Global growth of credit derivative market ($ in tn)
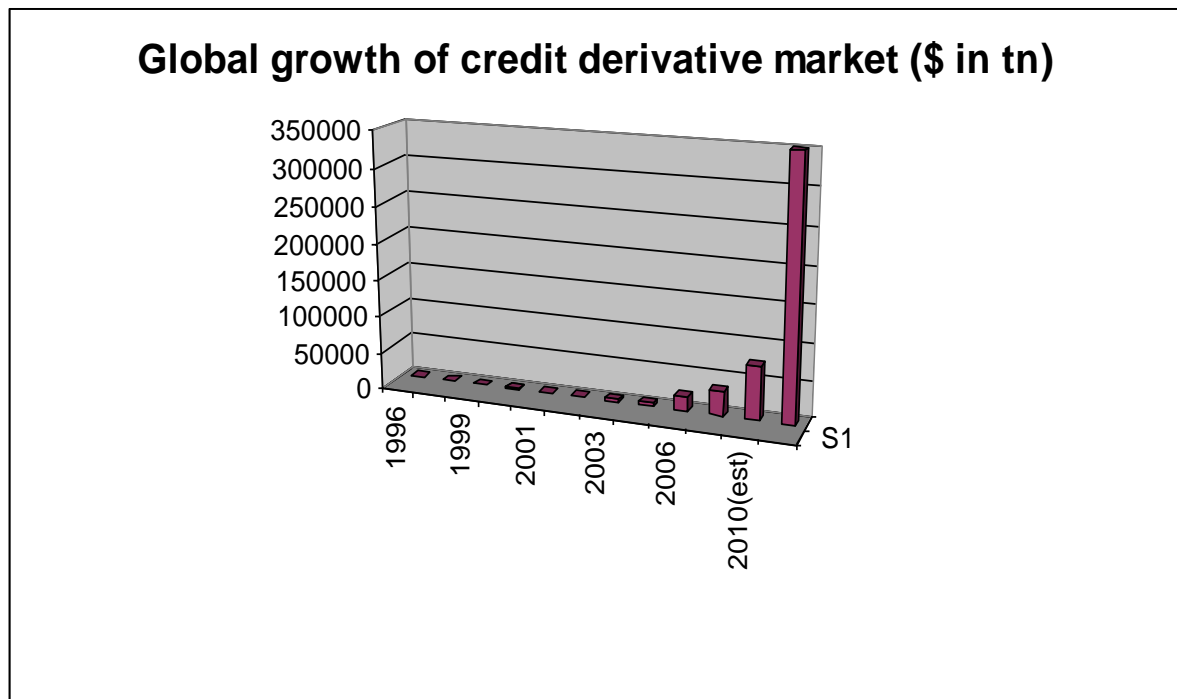
Source: British Bankers' Association-Credit Derivatives Report 2006

CREDIT DERIVATIVES- INDIAN CONTEXT

The RBI issued the draft guidelines on 26th March 2003. After that there was no activity on that side. However, after looking at the tremendous growth of these instruments globally, India has taken steps to unlock its door to credit derivatives. In May 2007, the RBI posted yet another draft guideline for public comments. Keeping in view, the assessment, risk management and accounting intricacies of the credit derivatives, the RBI has decided to allow them in a regulated manner. These mainly envisaged introductions of single entity CDS instruments which provide protection to a single borrower rather than many, permitting protection selling and buying to resident financial entities (banks, PDs and other entities as allowed by individual regulators) under the general ISDA framework. Special Investment Vehicle (SIV) and conduits are not envisaged.

6

Industry professionals think that the RBI is allowing credit derivatives at a right time when the lending is flying high. Also the credit growth rate is rising considerably at 30% per annum as the Indian economy is developing at a rate of 9% per annum. Since corporate India is preparing to invest $500 billion in the next three years, banks are gearing up to enhance their lending capacity to meet this potential rise in capital expenditure. At the same time, they need a route to mitigate the associated risk. It is here the credit derivatives have a significant role of effectively shedding the risk

Though the RBI's draft guidelines implement many restrictions on parties who want to transact in credit derivatives. All the parties who are engaged in the deals should be resident Indians and all the transactions should be denominated in Indian currency only. Also, it is compulsory that credit should be given only to the borrowers who are rated. Also, the guidelines permit only the local banks and primary dealers to make deals in Credit Default Swap. The purpose of a Credit Default Swap should be to hedge against the credit risk. Though, at the same time as the banks do not have to take on the credit risk through this way, it certainly improves the lending power of conservative banks that generally dither to provide a single borrower the loan beyond a certain point.

Besides this, it offers an opportunity for banks that works as protection sellers to augment their concentrated loan portfolio. For example, if a particular bank has provided loans only to a particular segment and is now concerned about the threats of concentrated loan portfolio, it can diversify its portfolio and get exposed to other segments by working as a protection seller. However, the bondholder who is not happy with the issuers credit repayment capability can opt to hedge the risk of non-payment with the help of credit derivatives. On the other hand, industry professionals are expecting that premium amounts paid by the banks could be finally passed on to the customers, thus impacting the loan pricing.

The truth that a small number of Indian borrowers such as ICICI Bank, Reliance Industries, SBI and Tata Motors are, by now, doing business in credit derivatives, in the overseas markets indicates the demands of those instruments in domestic markets as well.

The derivatives market in India has been developing swiftly and will persist to grow up. The development is incomparable. India has yet to appreciate the power of the credit derivative market. Despite the fact that, most of the actions is focused in foreign and a small number of private sector banks, more and more public sector banks are also playing a great role in this market as market makers are not just users. Their involvement is reliant on improvement of skill, acclimatizing technology and expanding sound risk management techniques. Corporates also have a significant role in these markets. Even as credit derivatives are important tools for hedging and risk transfer and therefore develop market efficiency, it is required to keep an watch the risks of excess leverage, lack of transparency, mainly in complex products, problems in valuation, tail risk exposures, counterparty exposure and unknown systematic risk. Obviously, better transparency is needed to capture the market. According to corporate point of view, recognizing the product and inherent risks over the life of the product is very much significant. More and more expansion of the market will also hinge on implementation of international accounting standards and disclosures practices by all the market participants, which includes corporate as well.

It is anticipated that credit derivatives will make the credit and bond markets more liquid, translucent and competent by facilitating better price discovery in India's illiquid bond markets.

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