TECNIA INSTITUTE OF ADVANCED STUDIES

Tecnia Institute of Advanced Studies

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To pursue international Quality standards of excellence in Academics, Research and Consultancy, Administration, Extension Services through review processes of self-evaluation of suitability and improve quality objectives to remain accountable in core and support functions to provide quality education in Management, Mass Communication and Information Technology.

Vision

To emerge as one of the world's leading institute through continuing to the highest academic standards, by developing strong industry-academia bond and playing a pioneering role in research and development, so as to serve society by way of shaping professionals to conquer the present and future challenges to the socio-economic fabric of our society by dissemination of relevant knowledge through structured learning system.

Mission

To build & nurture a new generation of well abrest professionals who can work as positive change agents in the new millennium by helping the Indian industry attain and sustain global leadership. It will be our endeavor to assimilate and disseminate practical strategies to future professionals and to encourage their understanding of strategic perception to fulfill the mission of the organization in the fast changing global business environment and to make a significant contribution by providing an opportunity to the deserving candidates of society to have world class professional education and to inculcate among them the feeling of fraternity and patriotism.

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As a temple of learning of professional & technical education, we subscribe to, in dealing with membership and the public include the following:- Integrity, honesty, openness, personal excellence, constructive self-criticism, continual self-improvement, mutual respect, professionalism, quality in service and standards, innovaiton, accountability, objectivity. We are committed to our students and corporate partners and have a passion for use of technology in education. We take on challenges, and pride ourselves on seeing them through. We hold ourselves accountable to our students, corporate collaborators, Board members, Statutory bodies, Alumni and employees by honoring our commitments, providing results, and striving for the highest quality excellence.

Tecnia Journal of Management Studies

From The Editor's Desk

I take this opportunity to thank all contributors and readers for making *Tecnia Journal of Management Studies* an astounding success. The interest of authors in sending their research-based articles for publication and overwhelming response received from the readers is duly acknowledged. I owe my heartfelt gratitude to all the management institutes for sending us their journals on mutual exchange basis, and their support to serve you better.

We are happy to launch the Twelfth issue of our academic journal. The present issue incorporates the following articles:

❖ The Emergence of a New Era of Management: The Leadership Traits and Skills of Eastern Indian and Afghan Women

❖ Advertising a worthy linkage with web

❖ Effects of Celebrity Endorsement on Consumer's Buying Behaviour with Special Reference to 2-Wheeler Industry

❖ Growth Potential and Trade Opportunity for Indian Apparel Industry

❖ Working Hours as an Influencing Factor towards Work Family Conflict of Women Employees in IT Sector in Chennai City.

❖ Technical Efficiency of MFI's and its Determinants: An Empirical Study

❖ Social Entrepreneurship: challenges & Opportunities

❖ A Study of self concept among the acoustically handicapped and non-handicapped adolescents

❖ Distributed Systems Computing: Up gradation & Reliability

My thanks to the authors, Belal A. Kaifi, Bahaudin G. Mujtaba, Dr. Ajay Kumar Rathore, Ms. Sandhya Gupta, Mr. S.K. Dogra, Mr. J. N. Gupta, Dr. B. Aiswarya. B, Dr. G. Ramasundaram, BABU C., DR. R. Kasilingam, Dr. Jitarani Udgata, Ms Sarita Das, Dr. Prathibha Bala, Dr. Anamika, Mr. Vijay Singhal, Dr. U.S. Pandey who have sent their manuscripts in time and extended their co-operation particularly in following the American Psychological Association (APA) Style Manual in the references.

I extend my sincere thanks to our Chairman Sh. R. K. Gupta, who has always been a guiding light and prime inspiration to publish this journal. I am grateful to Dr. A.K. Rathore, Director, for his continuous support and encouragement to bring out the Journal in a proper form. I also appreciate Editorial Committee Members for their assistance, advice and suggestion in shaping up the Journal. My sincere thanks to our distinguished reviewers and all team members of Tecnia family for their untiring efforts and support in bringing out this bi-annual Journal.

I am sure the issue will generate immense interest among corporate members, policy-makers, academicians and students.

Editor

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General Information

The Emergence of a New Era of Management: The Leadership Traits and Skills of Eastern Indian and Afghan Women

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Abstract: *Women make up around fifty percent of the workplace in most large firms, especially in developing economies. Afghan and Indian women are in professional and management ranks of most industries. This study focused on the technical, human, and conceptual skills of women from Afghanistan and India to see if cultural differences and socialization in different political, economical, educational, and social systems can be a significant influencing factor. The researchers attempted to address whether Afghan and Indian women have similar or different orientations in management skills. The results of 202 respondents show that these two groups have significantly different management and leadership skills. Indian women scored extremely high on technical skills and Afghan women scored high on conceptual skills. Implications for researchers, managers, and human resource professionals are presented.*

Keywords: *Women, Management skills, Cross-cultural management, Culture, Afghans, Indians*

Introduction to Management

The modern workplace for most firms can be very diverse based upon many factors (gender, political views, religion, etc.) as the workforce today is filled with people from many different cultures, including Afghans and Indians. Powell and Greenhaus (2010) state, "Women who work in managerial and professional occupations, which are balanced overall in terms of sex, may be less likely to see themselves as highly feminine, than their counterparts in occupations that are less balanced in terms of sex" (p. 527). As such, public and private administrators must become effective managers of individuals with diverse cultures, backgrounds, and interests. Of course, "this necessity grows out of the relativity of values and the pluralization of society" (Cooper, 1998, p. 51). "Beginning in the early 1990s, a group of researchers, with funding from the U.S. Army and Department of Defense, set out to test and develop a comprehensive theory of leadership based on problem-solving skills in organizations" (Northouse, 2004, p. 39). While they offered some rudimentary findings, the problem-solving skills needed now are likely to change based on the situational factors. Thus, the research must continue for such skills since today's leaders must be effective leaders and managers by having relevant technical, human, and conceptual skills depending on their ranks in the leadership hierarchy. Therefore, this study is focused on understanding the management skills (technical, human, and conceptual) of women from Afghanistan and India.

Management, in basic terms, can be seen as the process of achieving organizational goals with and through people using available resources in the most efficient manner possible. Generally, people use the four functions of management which are planning, organizing, leading, and controlling (POLC) to achieve their organizational objectives (Jones & George, 2009; Mujtaba, 2007). *Planning* means

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defining an organization's goals, establishing an overall strategy for achieving those goals, and developing comprehensive plans to integrate and coordinate activities. *Organizing* includes determining what tasks must be done, who will do them, how the tasks will be grouped, who will report to whom, and where decisions will be made. *Leading* includes motivating and directing employees, and communicating and resolving conflicts. *Controlling*, on the other hand, means monitoring performance, comparing results and goals, and making corrections and adjustments as needed in a timely manner.

Management can also be divided into levels: first-level supervisors (managers), middle managers, and top management (Mujtaba, 2007). The changing story in management today, of course, is that the layers and layers of middle managers that most large organizations used to have are giving way to self-empowered teams and flatter organizations. In their interpersonal, informational, and decisional roles, managers try to balance *efficiency* (how things get done) with *effectiveness* (what gets done) depending on the situation, tasks, and people involved (Mujtaba, 2007, pp. 36-37). *Efficiency*, or doing things right, is a measure of how well resources are used to achieve a goal. The key element about efficiency is to be doing the right things right. *Effectiveness*, doing the right things, is a measure of the appropriateness of the goals chosen (are these the right goals) to get the firm to its destination, and the degree to which the stated goals are achieved (Jones & George, 2009). Effectiveness is concerned with selecting the right goals and making sure they are achieved. As a manager and leader, one must consider the consequences of not being both efficient and effective in a department and/or organization. The success of a person and an organization is often determined through effective and efficient management. If a manager or leader has a sense of purpose and direction, this will become contagious among his/her peers, colleagues, and employees. Effective leaders tend to set high standards to meet and exceed the stated goals and objectives. Furthermore, effective leaders are honest and truthful; they look reality in the eye and face the facts, while strategically planning to move forward.

Finally, the three basic skills that managers use are technical, human, and conceptual. The proportion of one's time spent in these areas may change as managers move up in the hierarchy (Katz, 1955; Mujtaba, 2007). For example, senior managers may not spend as much time in technical functions as those who are in first line management. Top managers tend to spend more time using their conceptual skills. In the article entitled, "Skills of an Effective Administrator" by Robert L. Katz (1955), the different skill requirements for different positions and responsibilities are described in detail.

As emphasized by most management scholars, research has shown that education and experience help managers acquire relevant managerial skills that let them perform their jobs effectively. Jones and George (2009) provide the following definitions for human, technical, and conceptual skills:

1. *Technical skills* are job-specific knowledge and techniques. The specific kinds of technical skills depend up on the manager's position in the organization.
2. *Human skills* include the ability to understand, alter, lead, and control the behavior of people and groups. The ability to communicate, to coordinate and motivate people, is the principal difference between effective and ineffective managers.
3. *Conceptual skills* include the ability to analyze a situation and distinguish between cause and effect. Senior level managers require high conceptual skills because their primary responsibilities are planning and organizing the long-term vision of the organization. Conceptual skills are often gained through formal education, reflection, and experience.

Katz (1955) was able to illustrate the management and ranks relationship by emphasizing the importance of human skills (i.e. high emotional intelligence levels) in all three management ranks: supervisory, middle, and top. Schwartz, Jones, & McCarty (2010) explain, "Although emotional intelligence is now part of the vocabulary in most organizations, few leaders we've worked with are fully comfortable engaging their own emotions or managing the emotions of others" (p. 123-124). Galbraith (2010) explains how women have natural human skills, "Women tend to prefer to build connections with other people and see themselves as relative equals" and further states, "Thus, a relationship defined by power over others is not as natural a state for women as it is for men. Women leaders often see themselves in the center of a web of relationships, rather than atop a pyramid" (p. 46). Katz (1955) suggested that top managers have high conceptual skills, high human skills, and average

technical skills; middle managers have high human skills, average technical skills, and average conceptual skills; supervisory managers have high human skills, high technical skills, and average conceptual skills.

Modern managers of a cross-cultural workplace should be able to use these skills as part of their management and leadership style. Maxwell (2010) states, "Cross-cultural connecting requires a lot of mental, physical, and emotional energy" (p. 153). It should also be noted that promotion in management hierarchy is often linked to a manager's ability to acquire the management skills and competencies that a particular company believes are important. The skills needed in management are the same for women and men managers. Research demonstrates that men and women are equally effective in leadership and management positions.

Women and Management

The glass ceiling is a concept "popularized in the 1980s to portray a barrier so subtle that it is transparent, yet so solid that it prevents women and minorities from moving up in the management hierarchy" (Morrison & Glinow, 1995, p. 169). The glass-ceiling phenomenon has haunted women for many years and has become a focal point in many research studies (Babcock, 2008; Beckman & Menkhoff, 2008, Lantz, 2008; Cabrera, 2009). Throughout the years, many theories explaining why women have been marginalized have emerged. One explanation is, "Women's absence from executive positions is simply a function of not having been in managerial positions long enough for natural career progression to occur" (Northouse, 2004, p. 274). A different explanation is that,

Men are more likely than women to negotiate for resources, training, and other factors that boost job satisfaction and success. It stands to reason that men who seek out career opportunities will advance more quickly in their organizations than equally qualified women who do not. (Babcock, 2008, p. 1)

In the workforce, women are also considered to be conservative and less competitive which can hinder an organization from reaching its goals and objectives. "Women are significantly more risk averse, tend to be less overconfident and behave less competitively oriented" (Beckman & Menkhoff, 2008, p. 379). Researchers have demonstrated that women in developed nations are also facing the same trials and obstacles in management. Heckman et al. (2010) explain how their data suggest that "whites and men

will be much more likely than their nonwhite or women counterparts to receive favorable customer satisfaction judgments, which should accelerate their journeys up the organizational ladder" (p. 257). Beckman and Menkhoff (2008) stated, "we find that women hold significantly lower positions than men in Germany, and Italy, a fact which goes hand in hand with significantly lower personal assets under management and shorter working hours" (p. 370). The disparity between men and women in management has been referred to as racism and sexism. "The rate of upward movement of women and minority managers provides clear evidence of nothing less than the abiding racism and sexism of the corporation" (Morrison & Glinow, 1995, p. 169). For example, some have claimed that "women leaders are themselves the problem, whether because they are simply less suited to executive demands than men, unavailable because so few are sufficiently qualified, or lacking in self-confidence" (Northouse, 2004, p. 274). Women also face employers who do not want to take the risk of hiring a top manager who may have to take time off due to a maternity leave. For example,

If a businessman is required to choose between a man and a woman possessing the same qualification levels, he would opt for the man, due to some misconceptions widespread among businessmen, such as the idea that women involve a cost when they take a maternity leave, that they create controversial relationships with their colleagues or they do not meet the necessary skills to be good executives. (Lopez-Fernandez et al., 2009, p. 42)

The new workforce has been described as a political arena full of different groups, behaviors, beliefs, and attitudes (Bolman & Deal, 2003). With globalization, women and minorities are continuously striving for managerial positions where they can use their conceptual, technical, and human skills to complete tasks and build healthy relationships. "Management and executive positions, along with professional and technical jobs, are among the fastest growing occupations...However, these occupations include jobs not traditionally held by women and minorities, who comprise the new workforce" (Morrison & Glinow, 1995, p. 168). Minority women, such as Indians and Afghans are also a significant part of the new workforce but "research on certain minority women, particularly Asians and American Indians, has essentially slipped through the cracks" (Morrison & Glinow, 1995, p. 170). The researchers

of this study were unable to locate prior research comparing the management skills of Afghan and Indian women.

Cultural Traditions: India and Afghanistan

Culture is a prominent factor in the differences people share. Such differences can be critical in effectively managing workplace diversity. Additionally, culture is important because shared values tend to regularize human behavior and make individuals more predictable (Mujtaba, 2007a). Knowing how others perceive and value their environment provides a guide for managers to anticipate behavior and respond effectively. This point is becoming increasingly more important as globalization brings distant peoples into closer contact while they face cultural, economical, and legal challenges (Scarborough, 1998); and the growth in international trade has dramatically increased people's understanding of the similarities and differences between diverse cultures (Gardenswartz et al., 2003; Ishii & Bruneau, 1994).

Some studies on cultural differences within the context of management have been conducted by Munene, Schwartz, and Smith (2000) and these researchers concluded that the Asian and African cultures tend to emphasize hierarchy, paternalism, and mastery in contrast to egalitarianism, autonomy, and harmony. Moreover, Asian and African managers often stress reliance on formal rules and superiors in reaching decisions as compared with the cultural profile of people in the United States or most European countries.

In today's competitive world, understanding and responding to culturally-driven behaviors are paramount to succeeding in cross-cultural management (Mujtaba, 2007a) because "the people in an organization are crucial to its performance and the quality of work life within it" (Rainey, 2003, p. 219). Afghanistan has a rich culture where people tend to socialize as a part of their cultural mores. However, they are also demonstrating more individualistic values as they attempt to secure long-term independence from undue foreign aid and political influences. Navigating between individualistic and collectivistic cultures and recognizing the shifts in diverse cultures can have a direct impact on how international firms and their people actually perform. People of an individualistic culture tend to value the needs, concerns, and identity of oneself above the needs of the community. As concluded by Mujtaba et al. (2007), collective cultures tend to focus more on world peace, being helpful to others and group interests, instead of an individual's personal needs.

Traditionally, both India and Afghanistan are collective and high-context cultures where women often stay home to take responsibility for rearing children while men work outside of the house. As a result, professional interactions between men and women are often limited, especially in rural areas. "Given the cultural orientations of males in the Indian society where exchanges with the opposite sex are limited, it is likely that efforts at ingratiation will enhance a male superior's favorable demeanor towards female subordinates" (Himanshu, 2009, p. 66). With globalization and modernization, women are playing bigger roles in the workforce of both countries. There has been a paradigm shift where women are encouraged to go out and work. In Afghanistan, both men and women work inside and outside of their home to help support their family. "Contrary to popular views in the west, many Afghan men oppose traditional ideologies of male superiority and dominance" (Rostami-Povey, 2007, p. 297). Women in India are also becoming more accepted in the workforce due to economic reforms. Interestingly enough,

While social, legal, and economic reforms have helped women to join the workforce in India, the continuing influence of normative attitudes and values have prevented them from altering the perceptions of the society as well as their own regarding their sex-roles. (Buddhapriya, 2009, p. 34)

The changes in the global economy have introduced new gender roles that have made organizations more diverse and full of managers with different managerial skills and propensities.

Study Methodology

The research question for this study is: *Do Afghan and Indian women have similar or different orientations in management skills?* For this survey, the overall sums of the scores determine the likelihood that a participant is better at a specific skill. The research hypotheses for this study are as follows:

- *Hypothesis1* –Afghan and Indian women will have similar scores for technical skills.
- *Hypothesis2* – Afghan and Indian women will have similar scores for human skills.
- *Hypothesis3* – Afghan and Indian women will have similar scores for conceptual skills.

The Skills Inventory survey instrument provided by Peter G. Northouse (2010, pp. 64-65) was distributed to Afghan and Indian women by using Face book as a social-networking instrument to get good participation. More specifically, the first author joined an Afghan social group (325 members) and Indian social group (275 members) on Facebook equating to 600 potential participants. He then posted on the main page of each group that he is looking for participants to participate in a study on "Eastern Women and Management Skills" to illuminate and promote their capabilities and strengths. Interested respondents were sent an email with the survey attached. A total of 202 surveys (Afghan surveys 102 and Indian surveys 100) were completed successfully by participants who live throughout the United States. So a total of 202 responses, which represents a 33% response rate, were used for analysis. According to Northouse, the skills inventory:

Assists you in understanding how leadership skills are measured and what your own skills might be. Your scores on the inventory will give you a sense of your own leadership competencies. You may be strong in all three skills or stronger in some skills than in others. The questionnaire will give you a sense of your own skills profile. If you are stronger in one skill and weaker in another, this may help you determine where you want to improve in the future. (2010, p. 63)

The skills inventory is designed to measure three broad types of leadership skills: technical, human, and conceptual. One can score the questionnaire by doing the following. First, sum the response on items 1, 4, 7, 10, 13, and 16. This is one's technical score. Second, sum the response on items 2, 5, 8, 11, 14, and 17. This is one's technical skill score. Third, sum the responses on items 3, 6, 9, 12, 15, and 18. This is one's conceptual score.

Many instruments have been used by different researchers to assess an individual's skills for management and leadership (Katz 1955; Rahman & Yang, 2009; Garman et al., 2006; Buttner et al., 1999; Egbu, 1999; Mumford et al., 2000). Instruments are designed to yield information about an individual's skills that can be used for training and development purposes. For example, Rahman and Yang (2009) explain,

One of the earliest surveys conducted to ascertain the skills required by senior logistics executives was performed by Murphy and Poist. In this survey they used three sets of skills: business skills, logistics skills and management skills. Business ethics was found to be the top-rated business skill, and personal integrity was found to be very important among management skills, whereas transport and traffic management was found to be the top-ranked logistics skill. (p. 141)

Other researchers have used instruments that linked managerial skills to creativity. "To date, the relationship between managers' creativity and their self and other ratings on managerial skills has not been examined" (Buttner et al., 1999, p. 229). Furthermore, Holtkamp et al. (2007) used an instrument by the name of Organization and Leadership Effectiveness Inventory (OLEI) to check for agreement on different leadership characteristics. Regardless of the instrument, many researchers understand the importance of managerial skills when planning, leading, organizing, and controlling.

The age range for both the Afghan and Indian females in this study was within the range of 26-39. When comparing education levels in this study, 9 Afghans have completed high school (8.8%), 86 held a bachelors degree (84.3%) and 7 held a master's degree (6.9%). For the Indian females 76 have a bachelor's degrees (76%), 21 have a master's degree (21%) and 5 have doctoral level degrees (5%). The industry that these participants worked in vary; for example, there were 17 Afghans that worked in education (16.7%), 16 worked in government (15.7%), 12 in a private sector (11.8%), 47 in retail (46.1%) and 10 in healthcare (9.8%). Alternatively, none of the Indians worked in education or retail. Seven worked in government (7%), 75 in a private sector (75%) and 18 worked in healthcare (18%).

Results

The results demonstrate that Afghan women have high scores on conceptual skills, followed by human, and then technical skills. Indian women on the other side, have high scores on technical, followed by human, and then conceptual skills. Both Indian and Afghan women have high scores on human skills that allow them to effectively work with others at all levels. The first hypothesis, "Afghan and Indian women will have similar scores for technical skills" cannot be supported as Indians have a significantly higher score (t= -82.51; p-value= 0.01; r=0.9856). Therefore, the first hypothesis is rejected. The effect size (r) usually represents the strength of association between two means that are continuous measures. These results falls in the large magnitude of effect

size (Valentine & Cooper, 2010; Effect Size Calculator, 2010).

The second hypothesis, "Afghan and Indian women will have similar scores for human skills," cannot be supported as Afghans have a significantly higher score (t= 14.77; p-value= 0.01; r=0.72). Therefore, the second hypothesis is rejected.

The third hypothesis, "Afghan and Indian women will have similar scores for conceptual skills," cannot be supported as Afghans have a significantly higher score (t= 84.95; p-value= 0.01; r=0.986). Therefore, the third hypothesis is rejected.

Pragmatic Implications and Recommendations

In this study, the data have indicated that Afghan women have higher conceptual skills and Indian women have significantly higher technical skills. India is a country that has embraced technology and implemented technology in the classrooms. Young Indians are exposed to technology, the internet for research, and social networking websites that prepare them for the cyberspace workplace. Also, Agarwal and Mital (2009) state,

The fact that Indian students are using SNWs [social networking websites] to understand the business environment, improve job prospects, and participate in formal discussion forums is indicative of their preparedness and zeal to contribute to their future place of work in India or abroad. (p. 109)

This may explain why Indians scored higher on the technical skills when compared to Afghans. Many countries such as the United States outsource services to India because of their technical skills and the ability of over 300 million college educated professionals who communicate fluently in English. As a matter of fact, "the successful technology manager is often distinguished not by command of any single set of knowledge or skills, buy by an ability to master changing demands—to learn, in other words" (Austin, Nolan, & O'Donnell, 2009, p. 338). Afghanistan is a developing nation where most students and the general public do not have access to computers, up to date books, or the internet because of 30 years of non-stop war which has forced the country to regress. "The Afghan workforce needs to be educated and trained so they can create a peaceful environment for themselves and effectively compete with their neighbors in the marketplace" (Mujtaba & Kaifi, 2010, p. 43). Afghans have been forced to develop their abilities for analyzing situations and distinguishing between cause and effect, hence, high scores on conceptual skills. One researcher explained, "Given that the Afghan community has been largely illiterate, the relationship between parents and school administrators and teachers was a delicate one" and further states, "The schools generally requested help from students' fathers for renovations and improvements to classrooms and schools, which accorded with traditional gender roles and expertise" (Hoodfar, 2007, p. 280). Afghans have mastered the art of improvising and being able to solve complex issues. A case in point is how the Afghan people were able to defeat the former Soviet Union (Superpower of the 1980's) by improvising and outsmarting their enemy by using Afghanistan's rough terrain as an asset and strategic resource. "Moscow's ultimately unsuccessful 10-year war [1979-1989] in Afghanistan" resulted in many casualties and much embarrassment for the Russian's who were defeated by "men on horseback" (Tanner, 2009, p. 34). Afghans also have higher conceptual skills because they have been trained from a cultural perspective to plan and organize their daily actions around faith and

Table 1.Afghan and Indian Women Management Skill Scores (St. Deviations)

Management Skills	Number	Technical	Human	Conceptual
Afghan Women	102	11.61 (2.01)	26.92 (1.58)	27.99 (1.19)
Indian Women	100	29.4 (0.78)	24.22 (0.92)	14.05 (1.13)
		t= -82.51; p=0.01	t= 14.77; p=0.01	t= 84.95; p=0.01
		Cohen's d = -11.6690 Effect-size r = -0.9856	Cohen's d = 2.088 Effect-size r = 0.72	Cohen's d = 12.013 Effect-size r = 0.986

spirituality because Islam is not only a religion but "a complete way of life" (Livengood & Stololska, 2004, p. 185). For example, when Afghans leave their house, they often strategically plan where they can pray throughout the day and also perform ablution, if needed. Thus, Afghans are able to improvise and control situations, plan and organize accordingly, and lead by example. Furthermore, successful managers in top management positions are expected to have human skills to complement their conceptual skills. As a matter of fact,

Afghan respondents from a high-context culture of Afghanistan are more relationship-orientated. Interestingly, their task orientation score is also in the moderately high range. Therefore, managers and supervisors should feel comfortable in knowing that Afghan employees will complete the task at hand in a timely manner while maintaining a healthy relationship with their colleagues, peers, customers, and superiors. (Mujtaba & Kaifi, 2008, p. 120)

Many Afghans have proven to be strong leaders in their professions. A case in point is Dr. Mohammad "Mo" Qayoumi, the President of California State University, East Bay. A leader from the field of medicine includes: Dr. Abdul Wali, who is co-chief of staff at Kaiser Permanente (the nation's largest Healthcare Maintenance Organization) (Kaifi, 2009). Many Afghans have become successful entrepreneurs, managers, executives, and educational leaders at various institutions throughout the western world.

Due to societal conditioning and cross-cultural tendencies of human nature, some managers assume that employees from high-context cultures such as Afghanistan are likely to be more relationship-oriented which may distract employees from not completing their tasks in a timely manner. For example, they may not be assertive enough to pressure their peers toward being more productive when there is a backlog or even to ask for help when necessary because they do not want to appear pushy or rude. Of course, such assumptions are often wrong as the Afghan respondents in this survey have higher conceptual scores when compared to their Indian counterparts.

These results are important elements for multinational managers, administrators of USAID (the United States of America's International Development) agency, NGOs (non-governmental agencies), and other contractors recruiting professionals for jobs and assignments in and around

Afghanistan or India. As a matter of fact, Afghan leaders from all professions have started emerging. There are currently many Afghan-American medical doctors, engineers, attorneys, professors, police officers, and many who work in either the private or public sectors of the workforce (Kaifi, 2009a; Kaifi, 2011).

The modern workplace for a multinational firm can be very diverse as the workforce today is filled with people who may have different management skills. Kaifi (2009) explains how using multiple frames to evaluate an organization will help a manager understand complex issues within an organization and will result in continuous improvements (p. 94). The glass-ceiling phenomenon needs to be eradicated as women such as Meg Whitman of eBay proved to be a successful manager. "Despite high-profile success stories of female CEOs such as Meg Whitman of eBay, only a handful of Fortune 500 firms in 2008 have a woman in the top spot. Consequently, concern remains about the progress women are making" (Wyld, 2008, p. 83). It is for certain that Afghan women bring diverse views and perspectives with an orientation toward top management positions because of their high conceptual and human skills when compared to their Indian counterparts who have high technical skills and are suited for more supervisory management positions.

Limitations of the Study

There are some limitations to this study and one is the limited amount of responses from each group. This survey can be combined with other more comprehensive instruments to enhance and confirm the results. Future studies can duplicate the research with a greater number of Afghan and Indian participants that are compared to other ethnicities. The fact that this study was conducted with a convenient sample population living in urban areas and expatriate Afghans and Indians living outside of Afghanistan and India was a further limitation. Future studies might control this variable by expanding the research population to include more respondents from various locations and providences within Afghanistan and India. Perhaps different populations, groups, and people working in various industries can be studied separately to see if culture is truly a factor in the management skills of female (and male) professionals. Finally, future researchers should consider translating the survey instrument into Persian, Pashto, and Hindi languages to facilitate the test subjects' preferred and dominant reading skills.

Conclusion

The workplace is filled with people of diverse cultures and backgrounds. Now, diverse women are making strides into higher management ranks. This study focused on the technical, human, and conceptual skills of professional women from Afghanistan and India. The results show that these two groups of respondents have significantly different orientations in management skills. Indian women have an extremely high orientation toward technical skills. This might be due to the fact that most Indian schools have traditionally done an excellent job of preparing workers to effectively deal with technical knowledge. Both groups of respondents, Afghan and Indian women, have high scores for the human skills which are important for effectively dealing with a culturally diverse workplace. Finally, the Afghan respondents demonstrated an extremely high orientation toward conceptual skills in management. This demonstrates that Afghan women feel comfortable dealing with complex issues and making important decisions.

Being that the Afghan women scored high on human relation and conceptual skills, and assuming that this is somewhat true of a larger sample, then it is imperative for the government of Afghanistan to integrate more female professionals into the higher political ranks due to their natural propensity to quickly solve challenging obstacles. In the private sectors, managers and human resource professionals in Afghanistan, India, and other countries around the globe can use this information to recruit the right employees from these two cultures so they can produce immediate and measurable outcomes for specific jobs. Lastly, future researchers can translate this survey in local languages in India and Afghanistan to study specific groups of respondents based on age, education, and work experience.

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ADVERTISING A WORTHY LINKAGE WITH WEB

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Abstract: *In advertising, capturing consumers' attention is imperative. Yet, how attention to advertising works in a World Wide Web context has not been researched extensively. This area is the main focus of this research. The World Wide Web is an interactive medium which has characteristics that deviate from traditional media channels. Considering the unique properties of the World Wide Web, outcome and central concept of advertising showed the perfect linkage with advertising.*

The Origin of Advertising

From a historical perspective, advertising can be seen as originating from the public criers on town markets (Dyer, 1982) in ancient cities such as Ur, Babylon and Jerusalem. The public crier served the function of providing timely, and sometimes persuasive, information about goods and services available on the market. In a similar fashion, the modern advertising of today is communicating to customers about available offers. The means of the public crier and those of modern advertising may differ but the basics remain the same. Daniel Starch argues that advertising in some form probably has existed "since the time when men lived in communities and competed with one another for the necessities and luxuries of life" (Starch, 1923, p. 17). Without going any further into the archives of advertising, it can be concluded that advertising is not just a recent phenomenon but has been an intrinsic component of society for quite some time.

Advertising as a scientific area for academic study shares similar characteristics as the marketing subject. Advertising is a subject that is often applying theories and ideas from other disciplines. For instance, the influence of advertising on consumers is understood in light of theoretical perspectives brought in from linguistics, literature, psychology, sociology, anthropology, economics and other subjects (MacInnis, 2005). Methods like ethnography, survey research, experimentation, quantitative modeling and the like are being used to assure a diversified understanding of the advertising phenomena. "Through this multi-method, the multi-theory perspective, we (the "blind men"), gain insight into the "elephant" known as advertising" (MacInnis, p. 14, 2005). Albeit this research does not span over all the areas and use all the methods stated above, it is clear that this research is an intersection where multiple subjects unite. In this sense, this study is following a traditional path in marketing and advertising research.

Advertising, being one of the means which can be used to market an offer by communicating to an audience, is intimately connected to primarily two areas. One area is marketing, which has the purpose to create, communicate and deliver value to customers (Darroch et al., 2004). Another area is communication, 1 which is the process of establishing a commonness or oneness of thought between a sender and a receiver (Schramm, 1955) or the process by which individuals share meaning (Dibb & Simkin, 1991). Duncan & Moriarty (1998) argue that marketing theory and communication theory share common roots and thereby they are enriching each other. Amalgamating marketing and communication consequently results into the area of marketing communication. In a marketing communication context, information is distributed to inform, persuade, motivate and to make potential customers aware of an organization's offering (Keller, 2001).

Marketing communication comprises of a variety of activities that aims at communicating with the company's customers. Marketing communication tools are typically divided into four or more defined areas and these tools or sub functions are often referred to as the promotional mix. The tools in the

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promotional mix are advertising, personal selling, sales promotion, public relations and can also be extended with for instance direct marketing, packaging, point of purchase display and event marketing (Keller, 2001). Of these mentioned tools, advertising will be scrutinized in greater detail since it is the main topic at hand and of special interest in this theoretical framework.

What is Advertising and What is a Web Advertisement?

In the literature, a number of descriptions and definitions of advertising can be found. An early definition by Daniel Starch (1923, p. 5) suggests, "The simplest definition of advertising, and one that will probably meet the test of critical examination, is that advertising is selling in print. Or to put it more completely, commercial advertising consists in presenting a commodity in print to the people in such a way that they may be induced to buy it". Starch's definition is easy to comprehend but is perhaps not the most elaborate one. A further problem is that the definition is too narrow in that it merely recognizes advertising in print as advertising. This means that it is excluding all other types of contemporary media channels for advertising. Yet, it ought to be kept in mind that Starch's definition of advertising was presented at a time when print was indeed the major means to convey advertising messages.

In a recent discussion on the topic of advertising definitions, the editor of journal of advertising, Faber (2002, p. 1), argued that definitions of advertising usually embrace components such as "paid'' messages, "from an identified sponsor" in "mass media" with the goal of trying to "persuade or influence". The same year as Faber published his notions, Richards and Curran (2002) screened a number of advertising definitions in order to capture the essence and put together a "current definition" which is as follows; "Advertising is a paid non-personal communication from an identified sponsor, using mass media to persuade or influence an audience".

Richards and Curran's definition of advertising aims at being general and thereby harbors all kinds of advertising, including Web advertising. Though, Web advertisements are somewhat different than for instance print advertisements. It is therefore appropriate to elaborate on what a Web advertisement is and what kind of Web advertisement is being targeted in this study.

Lei (2000) described the early banners as mini outdoor billboards that could not convey complex messages. This limitation that Lei pointed at in year 2000 has been eradicated and the modern Web advertising does not suffer from it any longer. On the contrary, Web advertisements can now provide quite complex messages as they are not constrained to being button advertisements or mini-billboards as they once were. Visually, the Web advertisements are quite similar to print advertisements but can in fact exhibit greater complexity, especially when animated. It is therefore misleading to speak about "Web banners", when referring to advertisements on the Web. The word banner, in its basic form, denotes a rather primitive type of advertisement where usually a brand name or company name is printed on a large rectangular piece of fabric with diminutive room for anything else to be communicated.

Concurrent with the development of the Web banners, an entire industry of search engine generated keywords or "AdWords"2 have surfaced on the World Wide Web. These are clickable words in a text or small "AdWords" next to search results on a search engine. Albeit a majority of these "text advertisements" can qualify and be defined as advertisements, they are not of focal interest in this study. Instead, the following depiction may serve as a final guideline of what is meant by a "Web advertisement" here:
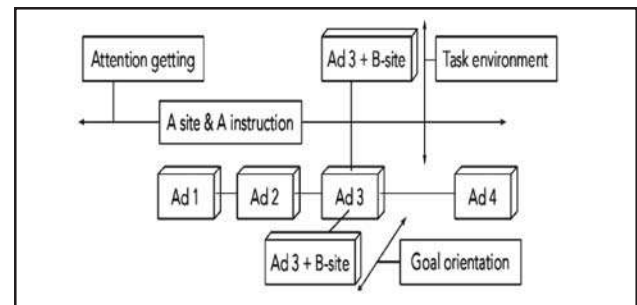
Fig. 4.2: The Research Design

The Web advertisements of today, contrary to the early Web banners, often have some basic properties such as an image or description of a product, a brand name, copy text and a headline put together into an advertisement entity – the Web advertisement. Visually, the Web advertisements are similar to print advertisements and they are both intended to convey advertising messages.

One question that can be raised at this point is where to draw the line between simple animation and full streaming video. The answer is not

uncomplicated especially considering the fact that more and more animation is being used in Web advertisements and there are a number of techniques for producing motion or animation on the Web. Only a few years previously, most animated Web advertisements were alternating between two or three visual presentations of the advertisement. At present, the advertisement designer is free to choose, from static to full motion picture, making the distinction between simple animation and full motion picture (advanced animation) irrelevant or arbitrary. To confuse things even further, there are Web advertisements that occasionally use both simple animation and streaming video. Considering that animation means moving picture, it is perhaps more relevant to discuss in terms of more or less animation employed and leave it at that

The Web is Growing Important

Traditional media like TV, Radio, billboards, newspapers, magazines et cetera are well-established channels for advertising. The Web, conversely, has appeared more recently yet is increasing in importance for advertisers as well as publishers. Figures are pointing at a rapid growth of the Web (IWS) and advertisers are also expecting the Web's importance as a media channel to increase Dréze & Zufryden (1997) stated a decade ago that one of the reasons for the increased importance of the Internet is the "tremendous growth" that it has undergone in recent years. The growth after 1997, when Dréze and Zufryden made their remark, has indeed been rapid with an astonishing 1086 million users in the World in October 2006 (Internet World Stats). Hoffman and Novak (1996), who often are considered as forerunners in the area, argued that research in this area is still in its infancy and that there is a lot of research to do to map the terrain. Ducoffe (1996) and Ducoffe et al (1996) declared early that, "continuing developments in the area of new media technology represent the most important influence on the future of the advertising industry over the next 10 to 15 years".

Zhou and Bao (2002) argue that it is not merely the Internet's tremendous growth that makes it interesting among researchers, but furthermore its "distinctive characteristics". These distinctive characteristics of the Internet, sets it apart from other types of media channels since it is a type of media with hybrid properties (Dréze & Zufryden, 1997). The distinctive characteristics that are being referred to

are for instance the ability to use animation, pop-up features, radio, streaming video, TV, interactivity and the like in one and the same media and all at the same time, if one so wishes. Coupey (1999) expresses the possibilities with the Internet and the Web, stating, "The unique features of the media can provide a focus to extend or to create theory, methodologies, and the discovery of new phenomena." Altogether, there seem to be reasons to believe, that the World Wide Web is an important type of media to study and that research in advertising connected to the World Wide Web is in a state of renaissance.

Advertising is Taking Place in a Setting

Marketing activities such as advertising are taking place in a social setting. These are in actual fact taking place ubiquitously in society, between companies and consumers. For instance, when an individual is starting the day by reading the morning paper she will be exposed to a number of advertisements. These advertisements are placed in a certain setting. Consumers are constantly exposed to brand names, company names and window displays affect ting them in various ways.The number of potential encounters with advertising and other marketing activities are too numerous to describe.

To the long line of traditional encounters, the digital ones are now also added. A typical "digital encounter" is when an individual is surfing the Web and being exposed to a Web advertisement that may be part of an even greater advertising campaign. To identify the boundaries of what constitutes a situation, Belk (1975, p. 159) puts forward five groups of situational characteristics representing general features.

Physical Surroundings – the most apparent features of a situation, the physical surrounding includes such aspects as geographical and institutional location, décor, sounds, aromas, lighting, visible configurations of merchandise or "other material surrounding the stimulus object" (Belk (1975, p. 159)).

Social Surroundings – which provide additional depth to the situation such as other persons present, their properties and roles, interpersonal interactions going on and the like.

Temporal Perspective – a dimension of situations specified in time units and related to some other entity.

Task Definition – "features of a situation include an intent or requirement to select, shop for, or obtain information about a general or specific purchase. In addition, task may reflect different buyer and user roles anticipated by the individual". (Belk (1975, p. 159))

Antecedent States – is another group of factors that can characterize a situation. These are moods or short termed conditions immediately antecedent to a situation. They are states that the individual brings into the situation and not the result from being in a certain situation. Albeit Belk's characterization of a situation is not targeting the Web case per se, it is apparent that there are similarities.

In a number of studies (see f.i. Lavidge, 1966; Ward & Robertson, 1973; Belk 1974a, 1975; and Kakkar & Lutz, 1981) the significance of situational factors has been deemed imperative. Extending these notions to the advertising area would mean that advertising surrounding us and reaching our minds through our senses, is taking place in a setting where situational or contextual factors evidently are at play. This means that the design of a Web site, the colors, the framing of various areas and, in particular, the complexity of the Web site may have an impact on how people attend to, receive, process and make sense of communication. One setting may be more effective, from an advertising point of view, than another setting. In figure 2.3 below it is illustrated how the "total" environment, in which a Web advertisement may be inserted, is built up by external factors outside the screen; the Web environment, the focal area and other surrounding areas on the screen.

Outcomes of Advertising

Hitherto, it has been discussed how advertising is defined, that the World Wide Web is a different kind of environment and that advertising is taking place in a setting. Equally important is to add the
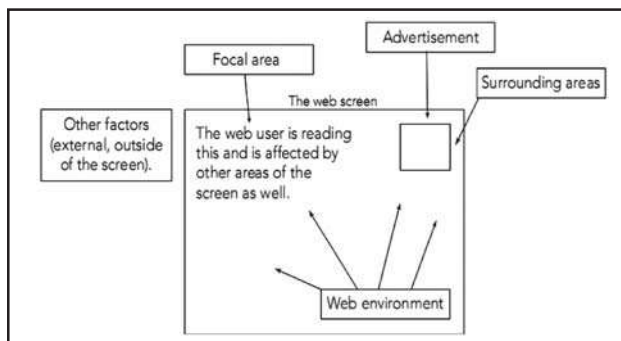
Fig. 2.3: The Web Environment

outcomes of advertising. Companies, governments, non-profit organizations, political parties, and other entities employ advertising because they want specific outcomes from it.

An advertising campaign is generally undertaken in order to pursue certain goals. The goals that are pursued are often formulated by the organization or an external partner, which is designing the advertising. The reason why an organization does advertising varies but it is often done to achieve some basic effect. It can for instance be to inform (Keller, 2001) the public or a target market about services available, or to change the attitudes (Petty & Cacioppo, 1984) towards some object or activity, for example, to not drink alcohol and drive. Other examples of desirable effects are to create interest (Smith & Swinyard, 1982) towards the product that a company is promoting or to motivate or persuade (Richards & Curran, 2002) the consumers to choose offer A before offer B. For companies that are striving to make profit it is important to achieve action or an actual purchase (Lavidge & Steiner 1961) which frequently is the ultimate goal in a chain of events. However, before coming to the very end of the purchase process it is imperative, as a first step in this chain, to capture the attention (Janiszewski and Bickart, 1994) of the audience targeted. From a communication perspective, the organization ought to start by assuring that it has the consumers' attention. Only then it can be effective in its endeavor to transfer information or to present an offer in a favorable and appealing way.

If the advertiser does not capture the attention of the consumer, then the opportunity to communicate with her is lost. With an ever-increasing number of advertisements, competing for existence the consumers' attention has become a scarce resource (Adler & Firestone, 1997; Davenport & Beck, 2001; Pieters & Wedel, 2004). From an individual advertiser's perspective, the task is to break through the clutter of advertising messages and other kinds of information that is calling for the consumers' attention.

Krugman, one of the researchers who have focused quite some effort on attention in marketing communication and advertising, has argued that consumers are screening "[...] the advertising and distributing their attention selectively" (Krugman, p. 48, 1988), with closer attention to some advertisements and with less to others. Krugman has also emphasized the role of capturing the audience's

attention and pointed it out as particularly important. Janiszewski and Bickart (1994, p. 329) are also pointing out the initial phase of effects, attention, as important. Horace Schwerin (1967, p. 56-57) states, in line with Krugman, that "The opening sequence of any commercial is of key importance, since advertisers must capture and hold the attention of viewers to retard them from mentally or physically tuning out". Krugman has in his research also studied how to measure attention effects adequately using measures such as recall and recognition.

Unfortunate for organizations using advertising to communicate with their target audiences, there are not only desired effects that occur but every now and then also non-effects or even worse, undesired effects. To this category of unwanted effects belong, for instance, mistakes on the part of the advertiser (messages out of tune) so that the audience does not recognize the organization, its offer or brand. It can also be mistakes on the part of the media-planning agency or others involved in the process of bringing the message to the audience. Among all potential errors, and error sources, is an additional error that has been highlighted as the World Wide Web has grown and developed to become a part of everyday life. It is connected with the advertisers' ambition or over-ambition to get the attention of the audience. On the Web, it can be termed the "pop-up effect", which is when Web advertisements are calling for too much attention and thereby become intrusive or annoying to the user surfing on the Web site where the advertising is presented. As mentioned in the previous chapter, Brackett, Benjamin and Carr (2001) found examples where the Web surfers considered advertising on the Internet being irritating, annoying, and even insulting to people's intelligence.

This kind of negative effect is not what organizations generally want to be connected with, since it may instill negative attitudes in the audience.

Attitudes are central when discussing around both positive and negative outcomes of advertising. An attitude is a latent variable that cannot be directly observed. The attitude refers to a tendency of psychological nature that is expressed by evaluating a certain entity with some degree of favorability or unfavorability (Eagly & Chaiken, 1992). The entity referred to, often called an attitude object, can be virtually anything that can be discriminated by an individual. Hence, an individual can have favorable or unfavorable responses towards an attitude object. The responses are generally characterized as being

cognitive, affective or conative. These variables, cognition, affection and conation are measurable. Therefore, the researcher is observing these variables in order to state what attitude an individual has. Cognition refers to thinking, affection to emotions and feelings while conation refers to actual behavior towards an attitude object.

Using the attitude terminology, it is adequate to state that a company can use advertising to initiate, alter or reinforce a consumer's thoughts -cognition- around a particular product or product attribute. Furthermore, it is at times desirable for advertisers to create certain emotions or feelings -affection- towards a product or its attributes. The last part is to make the consumers take action -conation- in relation to the attitude object, for instance to purchase the product and to use certain product attributes.

Even though it may seem obvious that attention getting can produce negative attitudes, other effects can work in the opposite direction. Part of the attention getting will produce brief exposures that have the potential to create an effect in the opposite direction. For instance, a Web advertisement is perceived as annoying, due to aggressive attention getting, while the brief exposure takes place. On the other hand, the consumer may forget about how annoying the advertisement was when recognizing the product and brand in the store. Since the consumer has been exposed to the brand a number of times, the brand will have a greater "familiarity" than other unfamiliar brands. Mandler, Nakamura and van Zandt (1987) suggest that mere exposures can have the potential to produce a kind of vague feeling of familiarity that later could be interpreted as liking. In a recent study, Monahan, Murphy and Zajonc (2000) arrived at the conclusion that "enhancement of one's mood state can occur by virtue of repetition of exposure" (Monahan et al., p 465). This would indicate that repetition alone has the potential to influence liking.

In a specific Web advertising case, the effects mentioned above are working in two directions. On one hand, too aggressive attention getting may evoke negative attitudes and on the other hand repeating the message may influence liking.

In addition, when the consumer is in fact about to do the purchase the aggressive attention getting may be forgotten whereas the familiarity and liking may persist, in line with Monahan, Murphy and Zajonc's findings. There is nevertheless, the risk that aggressive attention getting in the advertising will

affect the Web site where the advertising is presented in such a way that users may avoid the Web site or dislike it. These mentioned effects are important when interpreting the results of the studies to be conducted and especially when transferring the findings into a real world situation. In this research, subjects will be exposed only at one occasion whereas in real world situations repetition is obviously a dimension to consider. At the same time, it is also worth to bring to mind that there are significant methodological differences between Monahan et al's study and the one presented in this study.

The World Wide Web as an Advertising Vehicle

The development of marketing communication on the Internet has been rapid, driven by a variety of companies exploring the possibilities on the Web. According to Hoffman and Novak (1997b) the Internet is a new "market scape" that calls for a new marketing paradigm. This, since consumers are more active on the Internet than is the case with other media (Hoffman and Novak, 1996). That a new marketing paradigm is needed as a consequence of the emerging use of the Internet and the World Wide Web is perhaps to stretch matters too far. Nevertheless, the development of the Web poses a challenge to companies in a variety of industries and in particular to organizational functions related to marketing communication and advertising. An opposite stance that some are taking, compared to for instance Hoffman and Novak, is that the Internet and the World Wide Web is not very unique; it is just another communication channel among a number of channels. This stance is, on the other hand, perhaps not quite acknowledging the versatile nature of the Web or the radical impact that it has had in most parts of society.

With the Internet, companies have gained a new platform to communicate to and with their target audience. This is possible through various means such as e-mail, chats, instant messaging, discussion groups, news groups, on-line gaming, hypertext links, short message services through gateways to GSM networks, ip-phone communication and the like. One of the most important and current possibilities with the Internet is to use it for advertising on Web sites and Web pages.

Advertising on the World Wide Web has increased the last few years giving new opportunities for marketers to reach their customers. Advertising can be conducted in different ways on the Web ranging from static banners and advertisements, click through banners, traditional as well as interactive commercials "broadcasted" with streaming video, pop up advertisements (interstitials), triggered advertisements, or a combination of two or more of these advertising tools. The variation and combination of different kinds of advertisements are greater on the World Wide Web in comparison to any other type of media.

Advertising on the Web has both differences as well as similarities when comparing to established advertising media such as TV, radio or print. A salient property distinguishing Web advertising from other kinds of advertising is that it has hybrid characteristics combining properties from print, broadcast, out-door, and direct response media (Dréze and Zufryden, 1997). As a whole, these properties give Web advertising designers room for creativity and development of new combined types of advertising. However, advertising on the Web can be distinguished from other broadcasting media (television & radio) since the advertising message is integrated within the editorial material in the same manner as in print media (Chandon, Chtourou and Fortin, 2003). In television and radio, advertising messages and program content is presented sequentially. That is, program content is presented in a separated block which is interrupted by a block of commercials and subsequently a new block of program content is followed by a block of commercials and so on. Thus, the commercial block creates a "pause" in the program content that can be used for various activities10 by the consumers. The pause represents a possibility to divert the attention from the media and thereby the advertising as well. On the Web, advertisements are competing with the Web page content for the consumers' attention in a parallel way. The consumers' attention is thereby continuously directed to an area close to the presented advertising material.

In the case of parallel presentation Web advertising is similar to print where advertisements are presented together with program content or the editorial environment. Nonetheless, the dissimilarities between Web and print that are often pointed at are most of all that the Web has a greater interactivity, greater complexity and a high level of flexibility (Bruner & Kumar, 2000, Karson and Korgaonkar, 2001). There are of course differences in the visual appearance as well.

The Web Dimension of Advertisements

When studying different World Wide Web advertisements and what various authors have written about Web advertising11 one will soon discover a diversity of types of advertisements and also a general lack of classification. Most authors are referring to and studying the banner advertisement, hitherto few are describing its properties12. Yet, development of the WWW has brought new advertisement tools, which in turn has made it evident that these tools have to be classified. Classifications have however been poor or at least not up to date with the rapid development in terms of advertisement design and also development of information technology infrastructure, making it possible with larger and more demanding advertisements on the Web.

Despite the rapid development in some parts of the world, researchers are still referring to the banner advertisements as, "…the most common form of advertising currently" (Danaher and Mullarkey, 2003, p. 253), which is a small billboard-like graphic that appears on a Website that is clickable (Hoffman and Novak, 2000), and furthermore, "…is a rectangular shaped image typically located at the top of a Web page" (Chandon, Chtourou and Fortin, 2003, p.217).

The notion that a banner advertisement is a rectangular, small billboard-like graphic and also the most common form of advertising currently, does not fit well with the kind of advertisements that is frequently being used on many north-European Web pages as well as international ones. Pilot study number two pointed in the direction that Web advertisements nowadays have little or no resemblance of their banner counterparts from the mid-nineties. The one-colored, static banners that were being used at that time are infrequently used on today's Web pages. Since modern Web advertisements are becoming increasingly similar to print advertisements as opposed to banners, one could argue that it is about time to rename these modern Web advertisements. In addition, when taking into consideration the fact that banner advertisements have the purpose to evoke click-through at least for high-involvement and functional products (Dahlén, Ekborn, and Mörner, 2000; Dahlén and Bergendahl, 2001; Dahlén, 2002) and that the click-through rates have fallen to below 1 ‰ (or 1 in 1000), it seems as if banner advertisement's prime time has reached its peak. Still, there are banner advertisements that are being used and that will be used although new sizes and formats are also appearing. Even though many researchers are still holding on to the banner advertisement, the Interactive Advertising Bureau - IAB, is leading the way forward and have presented a new system for categorization of advertisements, which include more updated formats.

The Interactive Advertising Bureau have developed general standards, classifying advertisements into two broad categories, the "In-page" advertisements and the "Out-of" page advertisements. An In-page advertisement is a Web advertisement presented directly on the Web page itself15. An Out-of page advertisement is an advertisement that is not presented directly on the Web page. An Out-of page advertisement could, for example, take the form of a pop-up advertisement that will appear as soon as one has clicked on a launching link or when entering a Web page or the like. Out-of page advertisements have furthermore been subcategorized into "Over the page advertisements" (pop-ups), "Between page advertisements" (transitional advertisements) and "In-stream advertisements" (Streaming video commercials. The Out-of page advertisements have in common that they are advertisements presented in a separate window which is separated from the actual Web page that the user is using and visiting.

In-page advertisements can have different sizes, shapes and any property that can be presented on a Webpage. It is usually presented in conjunction with program content on the Web site and is thereby competing with the program content for the user's attention (Chandon, Chtourou and Fortin, 2003). In-page advertisements are either static advertisements or animated advertisements. The use of static Web advertisements are declining and in Chandon's study only 7.2 % of over 1200 advertisements studied were not animated. Their study, that measured click-through rates, indicated that animation is beneficial to advertisers since it appears to improve click-through rates. Kisielius and Sternthal (1984) found that vivid information attract user's attention easier due to its sensory effects. On the Web this means that animation may increase the likeliness to attend to the advertisement (Zhou & Bao, 2002). Another study conducted by Lohtia, Donthu and Hershberger (2003) indicated that the animated advertisements increased the click-through frequency and the authors are strongly recommending the use of animation. In a study by Sundar and Kalyanaraman (2004) arousal

and memory were studied as a function of animation speed. Sundar and Kalyanaraman's findings are pointing in the same direction. That is, animation has an impact on measures such as arousal and recall with an increase when animation is speeded up. Their study deviates from the former studies since it is not based on click-through frequencies. Instead, their study used a physical measure, namely arousal which is measured via electrodes during the session, and also recall which is a measure often employed in advertising research. In these reported studies, recognition has not been used as a main measure, a measure that for instance Krugman is advocating when measuring advertising effects (Krugman, 1986).

An out-of-page advertisement is a group of advertisements comprising of "over-the-page" advertisements, "between-page" advertisements and "in-stream" advertisements. In-stream advertisements and between-page advertisements, on the other hand, will not be covered in this study.

An over-the-page advertisement is a category of advertisements with the characteristic that the advertisement will appear over the Web page that is being viewed by the user. The main advertisements in this category are the well-known pop-up advertisements (also called interstitials) and also the floating advertisements. Floating advertisements are advertisements that appear when one enters a Web page, and the advertisements "float" or "hover" over the page for a short period of time, typically 5-10 seconds. Depending upon the attention getting strategy chosen, the floating advertisement might be placed either in a peripheral position or in a more central position obscuring the view of the Web page (Pilot study 2). The second type of advertisements belonging to the over-the-page category is the pop-up advertisements. The characteristics of the pop-up advertisements are that they "[…] utilize a Web-browser initiated additional window to deliver an advertisement impression either directly above or below the existing browser experience" (IAB report, 2004).
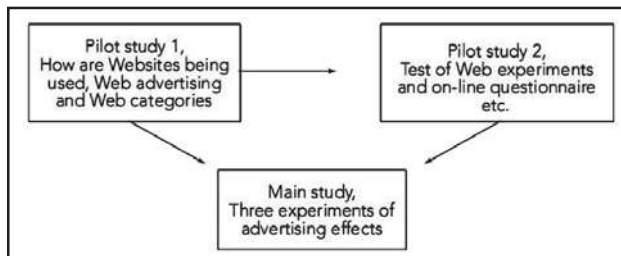
Fig. 4.1: General Description of the Research Design

The pop-up advertisements have two features that distinguish them from their static counterparts, namely some degree of surprise since they tend to appear from nowhere when the Web user enters a Web page or clicks on a certain hyperlink or some similar event. These features contribute to enhance the attention getting effect. The pop-up advertisement also adds motion or visual disturbance to the Web page area where it pops up. This is equivalent to the effect of animation even though the pop-up itself might not even be animated.

According to Beard (2001), the pop-under advertisement has become widely used in the industry. The reason for this is that the pop-under is a salient piece of stimulus since it appears on the screen in an unexpected manner and without the user's consent. In doing so, it is more effective compared to traditional banner advertisements. The attention getting features of the pop-under advertisements are equally relevant for pop-up advertisements as they appear on the screen in an unexpected manner and without the user's permission.

One of very few systematic studies on pop-up advertisements, by Diao and Sundar (2004) found that pop-up advertisements were superior in achieving ad-recall. At the same time they did not observe this effect for ad-recognition, contrary to their own hypothesis. On the other hand, they used a somewhat different methodology in comparison to this study. They used for instance heart rate in beats per minute to measure the response of the respondents. Furthermore, they relied on data that could be confounded. For example, they did not take into consideration differences in size between advertisements that were compared. Such a procedure is risking the validity of the results.

Research on basic forms of animation found that moving or flashing objects could be useful in attracting attention from one area of the screen to another as a consequence of its visual distinctiveness (Cropper and Evans, 1968, Smith and Goodwin, 1971). An alarming negative finding regarding animation was that it could be "distracting", "obtrusive", "disruptive" and "fatiguing" (McCormick 1970, Stewart 1976). Later research has, to some extent, supported these findings stating that the effect of animation at times can be "annoying", "irritating" and even "evil" (McGalliard 1998, Nielsen 1996, 1997, Spool et al. 1999). Hong, Thong and Tam (2004) have studied the phenomena of animation from an

information systems approach and found that flash indeed is a salient feature that has the potential to capture attention. A negative aspect (from the perspective of an advertiser or a Web site publisher) is that this attention getting technique can, under certain conditions, lower users attitudes' towards using the Web site in question (Hong, Thong and Tam, 2004).

Another problem less focused upon is the aggregate effect of attention getting techniques on the users of the World Wide Web as a whole. The more attention getting techniques used, the more mental effort that will be used to avoid advertisements, and in particular advertisements that are non-relevant from the user's perspective. One should not simply assume that there are no counter-measures against attention getting techniques. The users' attention system will use more resources to screen out advertisements. This could then result in what Cho and Cheon (2004) call "Banner Blindness", which is a negative development for Web advertising in general.

Regarding the pop-up advertisement, which is one of the most attention getting advertisements, there is the possibility to close them by clicking on the small "x" in the upper right corner on the pop-up window. According to one study, a majority of Web users are closing down the pop-up window within 3 seconds (Eyetrack, 2004). Another strategy is to not close the pop-up down but rather to avoid looking at it and after about 25 seconds to click somewhere else, which will cause the pop-up to disappear (Eyetrack, 2004). The pop-up advertisements are not only becoming a victim to Web users that are clicking them away. There are other initiatives taken by organizations where the purpose is to avoid advertisements (in this case pop-ups). Software producers developing Web browsers have sometimes added functions that are screening out pop-up advertisements. In Windows XP, for instance, the pop-up suppressing function is on, in default mode. This has of course been counter balanced by new versions of pop-ups that are passing these filters.

It was indicated earlier that practitioners are in favour of animated advertisements compared to static or non-animated advertisements. The non-animated advertisements' share of all Web placed advertisements have decreased and was about 7,2 % in 2003 when Chandon et al conducted their study. It is believed that the static advertisements are less effective as opposed to animated in-page advertisements and pop-up advertisements. The pop-up advertisement is in fact a special case of an animated advertisement (no matter whether the content in the pop-up window is animated or not) since it "uses" motion in the area where it appears, but is different compared to its in-page counterpart as it can be moved around or clicked away. Advertisers are eager to use attention getting techniques to attract users to their advertisements yet there are risks connected with this as well. It seems that the advertiser has to walk the fine line between getting attention and evoking fury, at worst.

Summary

Web advertisements have additional features, compared to for instance print, that can be used to attract attention. These attention getting techniques brought up here is: a static advertisement – where no technique is being used, an animated advertisement – where some kind of motion picture is being used and finally pop-up – where the advertisement is being abruptly presented somewhere on the Web browser creating disturbance and motion. The purpose with these attention getting techniques is to attract the attention of the audience.

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EFFECTS OF CELEBRITY ENDORSEMENT ON CONSUMER'S BUYING BEHAVIOUR WITH SPECIAL REFERENCE TO 2-WHEELER INDUSTRY

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Abstract: *The study conducted in Chandigarh city had the major aim of finding out whether celebrity endorsement act as a source of brand-building. The convenience sampling technique was used to collect the data. During the research an important factor revealed that mostly people want to see male celebrities endorsing automobile vehicles rather than females. There are a large number of mediums of persuasion but celebrity endorsement is an effective mode of persuasion. It was found that the Brand name and celebrity endorser are two factors that people consider before making a purchase intention of automobile vehicle. It was also found that celebrity endorsement have an impact over the purchase of automobile products as large number of people surveyed confirmed this fact. The right use of celebrity can escalate the Unique Selling Proposition i.e. it can act as a source of brand-building of a brand to new heights; but a cursory orientation of a celebrity with a brand may prove to be catastrophic for the brand.*

Introduction

Shahrukh Khan, a popular Bollywood star was chosen by Hyundai Motors, a South Korean company to endorse their Santro brand car into the Indian market a decade ago. He was chosen as the brand ambassador for promoting the new car into the Indian market. The Shahrukh-Santro campaign had the objective of mitigating the impediment that an unknown Korean brand faced in the Indian market. The objective was to garner faster brand recognition, association and emotional unity with the target group.

India is one country which has always idolized the stars of the celluloid world. Therefore it makes tremendous sense for a brand to procure a celebrity for its endorsement. In India there is an exponential potential for a celebrity endorsement to be perceived as genuinely relevant, thereby motivating consumers to go in for the product. This would especially prove true if the endorser and the category are a natural lifestyle fit like sportspersons and footwear, Kapil-Sachin and Boost or film stars and beauty products.

We are also a country where people love to live in dreams. They worship celebrities. These celebrities may be Cricket stars like Sachin Tendulkar, Mahinder Singh Dhoni or Film Stars like Salman Khan, John Abraham. They treat them as Gods. The Marketers use this very preposition so as to influence their target customers, may be existing or potential ones. For this, they rope in these celebrities and give them whopping amounts of money. They believe that by doing this they can associate their products with their target customers. This is called celebrity endorsement.

But do the celebrity endorsement acts as a source of brand-building and have an impact over the purchasing behavior of customers in case of automobiles. This study tries to find out the effects of celebrity endorsements with regard to sale of automobiles, especially the two - wheelers.

Lot of researchers have done extensive research work regarding celebrity endorsement and its influence over customer's purchasing decisions. After

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going through the literature related to celebrity endorsement, a gap was noticed which was whether celebrity endorsement acts as a source of brand-building and hence the present study is on this particular aspect.

This research is limited to Chandigarh City only due to various constraints like time available, scarcity of resources, feasibility aspects etc. From this study an attempt can be made to generalize the results to the whole universe. After conducting the research it was found that brand name and celebrity endorsers are the two key factors that play an important role in affecting purchase intentions. Majority of the people want to see their favorite celebrities endorsing their brands.

Need of the Study

After going through various sources like magazines, newspapers, websites it was found that lot of work has been undertaken by researchers regarding the impact of celebrity endorsement. But there was a gap in the research regarding whether celebrity endorsement act as a source of brand-building. So, a need was felt to discover this fact by undertaking research on this particular aspect. As the youth of the country are extremely fascinated with the actions and role of filmstars / cricket players, the study focused on the behavior of the youth. The study was conducted at Chandigarh City as the youth of this city was found to be very aspirational .

Objectives

- To analyse the effects of celebrity endorsements on consumer's buying behavior.

- To study the celebrity endorsement as a source of brand-building.

- To find out which type of celebrity persona is more effective.

Litérature Review

Philip A Stroke (2009) has found that the use of celebrity endorsement as a part of marketing communication strategy has been gaining popularity over the past years. Monies paid out by firms on endorsement contracts are estimated to be 10% to 25% of total advertising expenditures. However, empirical evidences on the effect of endorsement announcements on the stock prices performance of firms has been mixed at best. We analyze the share market perception of celebrity endorsement using a unique sample of 102 announcements. Stock returns and trading volumes depend upon the level of press attention. Endorsements that are in a major newspaper show higher average return and larger trading volume changes at announcement date than those announced on the corporate website only. Subhadip Roy (2007) in his study raises three questions and attempts to provide tentative explanations for them. The first two questions relate to locating, in the consumer's perceptual space, the relative position of Indian celebrities and brands on a set of personality attributes. The third question relates to determining the fit between the celebrity and the brands endorsed by him/ her. The results suggest that consumers differentially rank both celebrities and brands. Specifically, Amitabh Bachchan ranks high on five personality attributes and brands such as Pepsi and Coke rank high on four personality attributes. Goldsmith et al. (2002) assessed the impact of endorser corporate credibility on attitude towards the ad, towards the brand and the purchase intention. 152 adult consumers were surveyed who viewed a fictitious advertisement for Mobil Oil company. They rated the credibility of the ad's endorser, the credibility of the company and the attitude towards the ad, attitude towards brand and purchase intention. It was observed that endorser credibility had its strongest impact on advertisement while corporate credibility had its strongest impact on brand. Solomon et al. (2002) also talk about celebrities being most effective in situations involving high social risk where the buyer is aware of the impression, peers will have of him or her. According to him, a celebrity endorser is relatively more effective for products high in psychological or social risk, involving elements as good taste, self- image, and opinion of others, compared to a "normal" spokesperson. Expert opinions are considered most useful when the product endorsed was perceived to involve high, financial, performance, or physical risk.

McGuire et al.(1999) have opined that the Expertise is the perceived knowledge that the source possesses while trustworthiness is the degree to which the source is considered to be honest, ethical and believable. Both components are positively related to credibility but the influence of one component can offset the effects of the other. For example, a spokesperson that is viewed as knowledgeable will be ineffective if he or she is

perceived as lacking trustworthiness. Tellis (1998) argues that consumers in a high-involvement situation might actually be offended by the use of celebrity to endorse the brand. He also suggests that when there seem to be perceived high differences among competing brands, the consumer will perceive it as a high-involvement situation and puts extra emphasis on information about the product more than being influenced by celebrity endorsers. Hovland et al. (1953) have investigated that while encoding the message in the context of celebrity endorsement, perhaps the most important decision to be made, besides choosing whether or not to use celebrity endorsers at all, is the choice of celebrity. Much research has been made in this area and several models have been made to explain and assist in the celebrity endorsement selection process, individuals to represent their products, causes or organizations and ultimately the advertisers must assess the effectiveness of such a message.

Research Design and Methods

The study is exploratory in nature. The data has been collected using primary source through a structured questionaire. The target population of the study was the youth of Chandigarh City and the sample size was 500. Non probability sampling technique i.e convenience sampling technique has been used for data collection, %age method (using pie charts) and Chi square test have been used to check the hypothesis through SPSS 17 and XL STAT softwares.

Hypothesis Formed

The following hypothesis were formed:-

Ho1 Celebrity endorsement is not an effective tool of persuasion to facilitate customers to go for purchase.

Ho2 Celebrity endorsement doesn't affect purchase decision of automobile products.

Results & Discussion

- **Celebrity endorser as an effective method of persuasion:-**

  As the value of Chi-square test is 41.5 which exceeds the critical value of 9.49, hence Ho1 "Celebrity endorsement is not an effective tool of persuasion to facilitate customers to go for purchase" is rejected. Hence it can be concluded that celebrity endorsement is an effective tool of persuasion to facilitate customer to go for purchase.(refer Table 1)

- **Celebrity endorsement affects my purchase decision while going for the purchase of automobile products:-**

  As the value of Chi-square test is 32.5 which exceeds the critical value of 9.49, Ho2 "Celebrity endorsement doesn't affect purchase decision of automobile products" is rejected. Hence it can be concluded that celebrity endorsement affects purchase decision of automobile products. (refer Table 2)

Table 1: Chi Square Test

Preference	Observed	Expected	O-E	$(O-E)^2$	$(O-E)^2/E$
Strongly Agree	45	20	25	625	31.25
Agree	15	20	-5	25	0.25
Indifferent	10	20	-10	100	5
Disagree	20	20	0	0	0
Strongly Disagree	10	20	-10	100	5
					$\chi^2=41.5$

Table 2: Chi Square Test

Preference	Observed	Expected	O-E	$(O-E)^2$	$(O-E)^2/E$
Strongly Agree	30	20	10	100	10
Agree	15	20	-5	25	1.25
Indifferent	10	20	-10	100	5
Disagree	35	20	15	225	11.25
Strongly Disagree	10	20	-10	100	5
					$\chi^2=32.5$

The table 3 and chart 1 depicts that 45% of the people agree strongly or simply on the fact that their automobile purchase is being affected by endorsement, 10% of the people remain indifferent and 45% of the people disagree with this fact.

Table 3: Effect of Celebrity Endorsement on purchase decision

Preference	%age
Strongly Agree	30
Agree	15
Indifferent	10
Disagree	35
Strongly Disagree	10
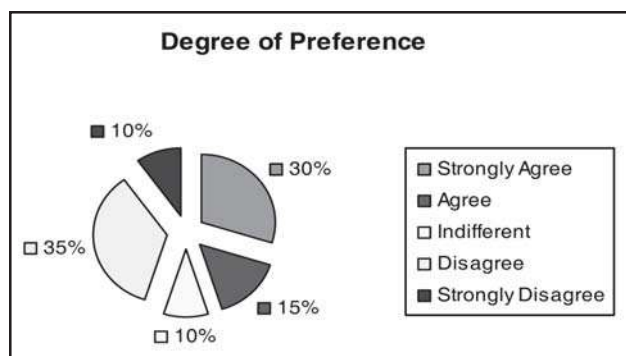
Fig. 1:   Effect of Celebrity Endorsement on purchase decision

- **Celebrity persona you like the most:**

    Table 4, Chart 2 depicts that majority of people like to see sports stars to endorse their brands and 25% of them bollywood stars, while remaining 20 % don't want any celebrity endorsing their brand.

Table 4: Celebrity persona you like the most

Celebrity persona	%age
Bollywood stars	25
Sports stars	55
None of the above	20
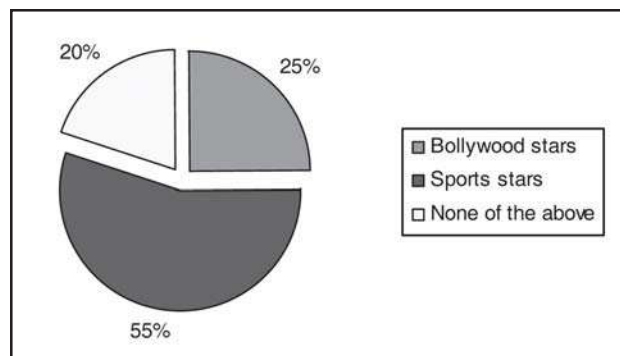
Fig. 2: Celebrity persona you like the most

- **You follow your favorite celebrity while purchasing new automobile every time:**

    Table 5, Chart 3 shows that 40% of people follow their favorite celebrity every time while going for the purchase of new automobiles. That means frequency is pretty large. On the other hand 25% of the people rarely follow their favorite celebrity, while 35% of the people don't follow any celebrity for purchasing any of the automobile vehicle everytime.

Table 5: Favorite celebrity followed while purchasing the automobile

Response	%age
Every time	40
Rarely	25
Never	35
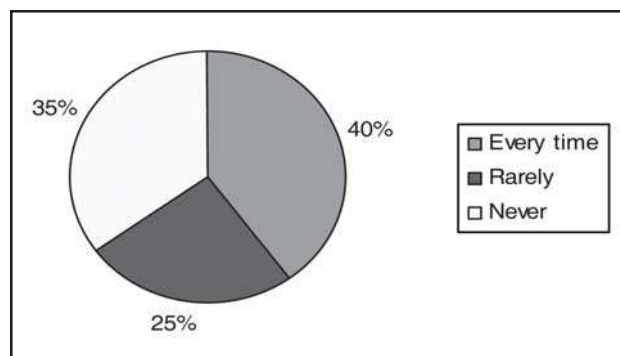
Fig. 3:   Favorite celebrity followed while purchasing the automobile

Findings

After completing the survey it was found that the Brand name and celebrity endorser are two factors that people consider before making a purchase intention of automobile vehicle. Maximum number of people want to see celebrity endorsing their automobile vehicles which means they have high involvement with the celebrities. One of the abstract findings of the survey was regarding people's orientation towards gender biasness. This finding clearly indicated that people like to see male celebrities endorsing automobiles than female celebrities. Most no. of people believe that celebrity endorsement is an effective means of persuasion i.e. it conveys the message clearly to the target audience regarding product offerings and persuade them to go for the purchase. It was found that celebrity endorsement have an impact over the purchase of automobile products as large no. of people surveyed confirmed this fact.

In a country like India where Cricket is a religion and cricketers are worshiped as Gods,one of the findings revealed that people admire sports players as better celebrity persona than that of bollywood stars. The results of brand recall were astonishing as most no. of people were able to recognize the celebrities endorsing the given advertisement. Thus it showed that celebrity endorsement is a source of more revenue for the automobile companies .

Conclusion

Despite the obvious economic advantage of using relatively known personalities as endorsers in advertising campaigns, the choice of celebrities to fulfill that role has become a common practice for brands competing in today's cluttered media environment. There are several reasons for such extensive use of celebrities. Because of their high profile, celebrities may help advertisements stand out from the surrounding clutter, thus improving their communicative ability. A brief assessment of the current market situation indicates that celebrity endorsement advertising strategies can, under the right circumstances, indeed justify the high costs associated with this form of advertising.

But it would be presumptuous to consider celebrity endorsement as a panacea for all barricades. Celebrity endorsement, if used effectively, makes the brand stand out, galvanizes brand recall and facilitates instant awareness. To achieve this, the marketer needs to be really disciplined in choice of a celebrity. Hence the right use of celebrity can escalate the Unique Selling Proposition i.e. it can act as a source of brand-building of a brand to new heights; but a cursory orientation of a celebrity with a brand may prove to be catastrophic for the brand.

It was found that people love to see celebrities endorsing their brands and so the involvement of common man is pretty high with these celebrities. So marketers should use the right celebrity matching with the product.

It was also found that people love to see sports stars endorsing their automobiles than bollywood stars. This is because of the fact that in India Cricket is extremely popular and famous and people worship players like Sachin Tendhulkar, Rahul Dravid, M S Dhoni etc. So they love to see these players endorsing their automobiles too. At last it can be said that a celebrity is a means to an end and not an end in itself.

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Growth Potential and Trade Opportunity for Indian Apparel Industry

J.N. Gupta*

Abstract: *Apparel industry is one of the oldest and largest export industries in the world. It is also one of the most global industries because most nations produce for the international textile and apparel market. Apparel production is a springboard for national development, and often is the typical starter industry for countries engaged in export-oriented industrialization due to its low fixed costs and emphasis on labour-intensive manufacturing (Gereffi and Frederick, 2010). The textile sector is having consistently high export performing with quite less import intensity. Considering the importance of the Sector, Govt. has initiated a number of schemes to increase investments (such as investment of over Rs 1,86,000 crores under Technology Up gradation Fund Scheme (TUFS) has been done in the last decade), developing infrastructure (Scheme for Integrated Textile Park i.e. SITP) and various other initiatives. Due to its inherent potential of creating millions of jobs (the highly labour intensive industry) and earning foreign exchange through increased exports, Government is pursuing 'garment led growth' strategy which would also boost the prospect of upstream segment of the industry like spinning, weaving and processing Further, elimination of global textile quotas under the Multi-Fibre Arrangement from January 1, 2005 has triggered a restructuring of existing patterns of sourcing and supply in the global textile and apparel industry. With suppliers free to export as much product as they can to any destination, the Indian Apparel Export Industry will have the opportunity to increase the rate of growth of exports (and thereby the global market share) provided Indian Apparel Industry is able to perform better than the apparel industry of other competing countries. This paper explores the parameters which is responsible for the decrease and increase of export and import of textile and decrease in market share. We conclude by the suggestion for improvement and growth of the apparel textile sector.*

Keywords: Apparel, Export, Potential, Competitiveness.

Introduction

Apparel industry is one of the oldest and largest export industries in the world. It is also one of the most global industries because most nations produce for the international textile and apparel market. Apparel production is a springboard for national development, and often is the typical starter industry for countries engaged in export-oriented industrialization due to its low fixed costs and emphasis on labour-intensive manufacturing (Gereffi and Frederick, 2010).

India's textiles and clothing industry is one of the mainstays of the national economy. It is also one of the largest contributing sectors of India's exports worldwide (annual report 2009-10, Ministry of Textile). The textiles industry accounts for 14% of industrial production; employs 35 million people, 4 percent to the GDP and accounts for nearly 12% share of the country's total exports basket. At current prices the Indian textiles industry is pegged at US$ 55 billion, 64% of which services domestic demand. Readymade Garments account for almost 42% of the

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total textiles exports during 2008-2009. The Vision Statement for the textiles industry for the 11th Five Year Plan (2007-12), inter-alia, envisages India securing a 7% share in the global textiles trade by 2012 (www.texmin.gov.in). Within the textile product category, apparel is one of the most prominent products. The apparel export sector contributes around 7 % to the India's total world export in 2009 (WITS Database, 2010). The garment industry has been classiûed in the United Nations International Standards Classiûcation as "those establishments, which cut, and/or stitch/make up garments out of woven or knitted fabrics without being involved in the manufacture of fabrics." Thus, the term apparel or garments would include ready-made garments as well as knitwear/hosiery (Ramaswamy and Gereffi, 2000). In this study, the terms "garments", "clothing" and "apparel" are used interchangeably to refer to HS-Codes(Harmonized System Codes) 61(knitted apparel) & 62 (non -knitted apparel) only (http://www.dgft.org). The textile sector is having consistently high export performing with quite less import intensity. Considering the importance of the Sector, Govt. has initiated a number of schemes to increase investments (investment of over Rs 1,86,000 crores under Technology Upgradation Fund Scheme (TUF) Scheme has been done in the last decade), Infrastructure (Scheme for Integrated Textile Park i.e. SITP) and various other initiatives. Due to its inherent potential of creating millions of jobs (the highly labour intensive industry) and earning foreign exchange through increased exports, Government is pursuing 'garment led growth' strategy which would also boost the prospect of upstream segment of the industry like spinning, weaving and processing (AEPC Cluster report, 2012).

Further, elimination of global textile quotas under the Multi-Fiber Arrangement from January 1, 2005 (www.wto.org) has triggered a restructuring of existing patterns of sourcing and supply in the global textile and apparel industry (Gereffi and Frederick, 2010) . With suppliers free to export as much product as they can to any destination, the Indian Apparel Export Industry will have the opportunity to increase the rate of growth of exports (and thereby the global market share) provided it is able to perform better than the apparel industry of other competing countries. At the same time there is a major threat of losing the current market share if the Indian Apparel industry is unable to perform vis-à-vis the apparel industries of other competing countries such as of China, Turkey, Mexico, Bangladesh, Vietnam, EU

countries etc. The study could help apparel export firms, Industry Associations and the Government to formulate appropriate action plans to increase and sustain global competitiveness in the quota-free era.

MFA Quota phase-out: Opportunities or Challenges for Indian Industry

According to literature, Naumann (2006) stated that the eventual phase out of MFA Quotas on textiles and clothing products on 1 January 2005 has created both opportunities and challenges for Indian Textiles industry. On the one hand, Indian textiles exports would find unrestricted access to US, EU markets under a quota-free regime, on the other, new challenges would be thrown up by our competitors like China, Hong Kong, Taiwan, and Korea etc. Naumann further stated that besides, big chunks of US, EU markets are likely to be captured by LDCs following new initiatives by developed countries to grant duty-free access to imports from LDCs.Gereffi and Frederick (2010) asserted that the removal of quotas on January 1, 2005 marked the end of over 30 years of restricted access to the markets of the European Union and North America. Retailers and other buyers became free to source textiles and apparel in any amount from any country, subject only to a system of tariffs and a narrow set of transitional safeguards that expired at the end of 2008. This caused a tremendous flux in the global geography of apparel production and trade, and a restructuring of firm strategies seeking to realign their production and sourcing networks to accommodate new economic and political realities. As per Verma (2002), export-competitiveness has been defined as increasing average growth rate in unit value of the product or increase in market shares (in value terms) over the years in broader sense.

Methodology

The secondary data macro level analysis the data considered for product classifications HS codes 61 & 62, at HS Code 2 digit level. Time series Data for 10 years were sourced in to consider the Global demand trend of apparel products. To understand the major designated market (world top 10 importers), data has been extracted for years 2007, 2008 and 2009. Similarly for finding out the world top 10 exporters (supplier countries) data have been extracted in time series from 1999 to 2009 to include India's export & her global rank in the world apparel market; and India's apparel exports were analysed vis-à-vis other world

competing countries exporting in the world. For world exporting countries for 10 years and importing destinations countries for 2009 (Trade volume wise) data were extracted for all countries in the world and then arranged in the descending order of value of import in that country. Further in these destination markets (importing markets) India's position through export value and share was analysed vis-à-vis other competing countries from the world. The major secondary data have sourced from the Ministry of Textile, Government of India(www.Texmin.nic.in February 2010 – July 2011), WITS Database (from January 2010 to July 2011), WTO (February 2010 – July 2011) and other government & non-government websites as mentioned there itself as per to the HS classification.

1.1 Global Apparel Market Trend Analysis

1.2 Import Trends of Apparel Products in the World

Table 1.1 below indicates the total apparel trade in the World vis-à-vis total World merchandise trade. Total apparel trade in the World has increased over the years. However, its share in the total World merchandise trade has decreased over the years as indicated in the table. In 2009 the percentage of total apparel trade in the world is at 2.1% of total World Merchandise Trade.

Table 1.1: Share of total Apparel trade in the total World Merchandise trade in the world

Year	Total World Merchandise Trade (in Billion USD)	Total Apparel Trade in the World (in Billion USD)	%age Share
2001	5984	197	3.3
2002	6270	201	3.2
2003	7294	226	3.1
2004	8621	250	2.9
2005	10159	274	2.7
2006	11960	311	2.6
2007	13800	345	2.5
2008	15740	362	2.3
2009	18000	375	2.1

Source: www.wto.org

From the table it is observed that the total apparel trade in the world is increasing at CAGR (compounded annual growth rate) of 7.32% from 1999

to 2009 & CAGR of 8.37% from 2001 to 2009. Following table 1.2 shows the position of India's Apparel Trade and its position in the total World Apparel Trade. From table it is observed that the India's total export (in USD) is increasing & its share in the total World Apparel Trade is also increasing, from 2.59% in 1999 to 3.01% in 2009; as observed in the following table.

Table 1.2: India's share in the World apparel trade

Year	Total World Apparel Trade [Export - In Billion USD]	India's Apparel Trade [Export - In Billion USD]	%Share of India	% share of Apparel Export in India's total export
2001	197	5.04	2.56	11.50
2002	201	5.5	2.74	10.98
2003	226	5.92	2.62	9.97
2004	250	6.41	2.56	8.45
2005	274	8.2	2.99	8.17
2006	311	9.01	2.90	7.44
2007	345	9.34	2.71	6.42
2008	362	10.3	2.85	5.64
2009	375	11.31	3.01	6.40

Source: www.wto.org

Further, from Table 1.2 above, it is observed that the total apparel trade in the world has increased at CAGR (compounded annual growth rate) of 7.32% from 1999 to 2009 & at 8.37% from 2001 to 2009. India's CAGR is 8.93% and 10.62% between 1999 to 2009 and 2001 to 2009 respectively. Table 1.3 below presents the top importing countries of world. Here the time series data has been given for the total import in the concerned country from the world in apparel products (HS code 61 & 62), which provides the import market trend. From this table, it is seen that there is consistent trend of same importers in the Global import market of apparel products for the years 2007 to 2009.

It is indicated that there is an increase in 2008 from the year 2007 in the import of apparel products in all the countries except some drop in US, UK & Hong Kong markets. Due to economic crisis, there is decrease in import of apparel products in these importing countries in 2009.

Table 1.3 Top Importing Countries for Apparel Products (HS code 61&62)

2007		2008		2009	
Reporter Name	**Trade Value (M $)**	**Reporter Name**	**Trade Value (M $)**	**Reporter Name**	**Trade Value (M $)**
European Union	79,398.59	European Union	87158.00	European Union	79647.48
United States	78,920.21	United States	76363.56	United States	66795.36
Germany	28,001.58	Germany	30505.00	Germany	28784.77
United Kingdom	23,602.69	Japan	24216.34	Japan	24069.83
Japan	22,597.55	United Kingdom	23423.15	United Kingdom	20825.31
France	19,663.62	France	21746.94	France	19509.83
Hong Kong, China	18,136.72	Hong Kong, China	17563.37	Italy	14590.71
Italy	14,909.85	Italy	16363.42	Hong Kong, China	14546.80
Spain	12,805.47	Spain	14830.43	Spain	12618.61
Belgium	8,597.04	Belgium	9737.19	Belgium	8381.60

Source: WITS Database, 2010

1.3 Growth of Indian Apparel export Industry in Global Apparel Market

China is the top exporting country of the world with 26.7% share (with export value $100.48 Billion) in total apparel export in the world whereas India is at.4th position with 3.01% share (with export value $11.3 Billion) in world apparel export in 2009.

In the table 1.4 below data are depicted for total apparel trade in the world and export values of India & China. China is the topmost exporter of the world. Hence, export volume comparison of India with respect to China has been done. From this table , it is observed that export volume of both India & China has increased from 1999 to 2009.In 1999 China's export to world was about 6 times the India's export. It has increased to about 9 times of India's in 2009. In absolute value, the gap in the export volume of India & China has become enormous during the period 1999 to 2009.

From the Table 1.5 below it is observed that the total apparel trade in the world is increasing at CAGR (compounded annual growth rate) 7.32% from 1999 to 2009 & 8.37% from 2001 to 2009. India's CAGR is at 8.93% and 10.62% from 1999 to 2009 and from 2001 to 2009 respectively. China's CAGR is at 13.90% and 15.25% from 1999 to 2009 and from 2001 to 2009 respectively.

From table 1.5 above it is seen that world export is increasing at CAGR (compounded annual growth rate) of 6.2% from 1999 to 2004 (during the quota period) and @ 8.45 % after the quota period. During these 2 periods India's CAGR has been 5.98% and 12.01%, whereas China's CAGR has been 14.92% and 12.89% during the quota period and after the quota period respectively.

An important inference drawn from the above table is that India's CAGR is higher than the CAGR of the world along with rise in export value during the period 1999 to 2009. This is an indication of increase of India's competitiveness in the world in the export of apparel products.

Table 1.4: India's vis-à-vis China's Export   **Figures in $ billion**

	Year	1999	2000	2002	2003	2004	2005	2006	2007	2008	2009
Country											
World		185	197	201	226	250	274	311	345	362	375
India		4.7	6.17	5.5	5.92	6.41	8.2	9.01	9.34	10.3	11.31
China		27.3	32.3	36.57	45.76	54.78	65.9	88.62	108.9	113.37	100.48

Source: Compiled from WITS Database, 2010

Table 1.5: CAGR of India's vis-à-vis China's Export

| Country | Compounded Annual Growth Rate (CAGR) | | | |
| | Period | | | |
	1999-2009	2001-2009	1999-2004 (during Quota period)	2004-2009 (after Quota period)
world	7.32%	8.37%	6.2%	8.45%
India	8.93%	10.62%	5.98%	12.01%
China	13.90%	15.25%	14.92%	12.89%

Source: Compiled from WITS Database, (2010)

1.4 India's Top Export Destination Markets

From table 1.6 below, it is observed that India's main export destinations are US & EU, with 27% & 50.6% share in India total export. EU & USA are the world's top apparel destination markets with 21.31% & 17.81% share in the total world Trade. Table 1.6 provided the top importing countries in the world for India's apparel export in 2009.

1.5 Apparel Exporting Countries in the World: India's comparative position with respect to her Competitors

In Table 1.7 below an effort has been made to present the position of top exporters of the world in

Table 1.6: Top importing countries in the world for India's apparel export in 2009

	India's Export to the following countries	Value ($m)	% in India's total export
	Total India's Export in 2009 = $ 11.312 billion		
1	United States	3,054.12	27.00 %
2	United Kingdom	1,450.55	12.82 %
3	Germany	1,299.79	11.49 %
4	France	1082.81	9.57 %
5	Spain	551.54	4.88 %
6	Italy	490.45	4.34 %
7	Netherlands	376.88	3.33 %
8	UAE	357.54	3.16 %
9	Canada	300.36	2.66 %
10	Belgium	216.62	1.91 %
11	Japan	192.71	1.71 %
	EU (Total)	5,712.73	50.56 %

Source: World Bank, WITS Database, 2010

a descending order for apparel products. The position of Indian apparel products export in world market with respect to other exporting countries of the world is depicted. The ranking has done on the basis of trade value. China is in top most exporting country during the decade consistently (China's share the world is 26.7% with export value $100.48 Billion in 2009), followed by Italy. Italy is maintaining 2nd place in world exporting countries and maintained growth since 2000 except a dip in 2009 during economic crisis. Germany occupies the 3rd rank from 2005 to 2009 (in recent years) and maintained growth throughout the decade except a dip in 2009 during economic crisis. Though India has not been able to surpass these competitors during 1999 to 2009, but maintained her rank within top 10 exporting countries from year 1999 to 2009. In fact India has come to the 5th position for year 2005 and 2006 among the world exporters. Then its position declined to 6th & 7th rank in the year 2007 and 2008 respectively. In 2009 India improved its position and occupies the 5th rank behind China, Italy, Germany and Bangladesh. From these statistics (such as increasing export volume), it is inferred that the export competitiveness of India has been improving & is not losing its position in the world market. It is also observed that in general India's competitors are either from Asia or European Union countries (EU & EU eastern periphery countries such as Turkey who get benefit of EU preferential trade). In recent years, India's competitors are China, Italy, Germany, France, Turkey and Bangladesh. An important feature observed that Bangladesh has acquired an important place in the world market by continuously enhancing its export value and rank among world exporting counties in recent years; hence it has become India's competitor along with other competitors such as China, Italy, Germany, France and Turkey.

Again From the above table 1.7 comparative position of top exporters in the world is available since 1999. In 2009, India's share in the world is 3.01% (export value $ 11.312 billion) while the shares of other top countries are (a) China's 26.7% (export value $100.479) (b) Italy's 4.84% (export value $ 18.152 b), (c) Germany's 4.13% (export value $15.506 and (d) Bangladesh's 3.78% export value ($ 14.192 b) in the world market. From these data, it is inferred that there is a substantial gap between India's export value & world demand as well as with respect to some of the India's competitors' export value. Hence, there is a large market scope for Indian apparel exporters to increase their export.

Table 1.7: India's comparative rank with respect to its competitors among the World Top exporters

(Trade Value in Million USD)

Rank	1	2	3	4	5	6	7	8	9	10
Country	China	Italy	Hong Kong, China	Mexico	United States	Germany	Turkey	France	India	Korea, Rep.
1999	27326.69	12881.69	9506.21	7558.99	7540.98	7332.12	6200.89	5399.33	4794.52	4488.79
Country	China	Italy	Hong Kong, China	Mexico	United States	Germany	Turkey	India	France	Indonesia
2000	32289.52	12453.22	9851.78	8431.68	7731.01	6456.1	6182.8	5464.73	5018.67	4,561.841
Country	China	Italy	European Union	Hong Kong, China	Mexico	Germany	Turkey	United States	France	India
2001	32407.99	13172.45	12613.55	9172.07	7833.36	6993.23	6280.63	6062.95	5119.71	5044.39
Country	China	Italy	Hong Kong, China	Germany	Turkey	Mexico	France	India	United States	Belgium
2002	36566.17	13540.13	8288.56	7796	7660.5	7627.49	5667.97	5499.03	5121.07	4,334.486
Country	China	Italy	Turkey	Germany	Hong Kong, China	Mexico	France	India	Belgium	United States
2003	45757.11	15449.06	9546.44	9127.94	8161.32	7191.24	6580.73	5912.12	5166.85	4,619.119
Country	China	Italy	Turkey	Germany	Hong Kong, China	France	Mexico	India	Bangladesh	Belgium
2004	54783.42	17348.6	10796.05	10597.81	8097.46	7426.99	7335.32	6414.97	6231.29	5740.607
Country	China	Italy	Germany	Turkey	India	Mexico	France	Hong Kong, China	Bangladesh	Belgium
2005	65901.6	17656.03	11719.6	11452.73	8200.65	7825.95	7217.42	7163.34	6845.53	6338.698
Country	China	Italy	Germany	Turkey	France	India	Hong Kong, China	Belgium	Bangladesh	Mexico
2006	88620.75	18806.39	13056.68	11649.26	9015.07	8559.78	8252.02	6909.48	6711.1	6,192.982
Country	China	Italy	Germany	Turkey	Bangladesh	India	France	Belgium	Vietnam	Spain
2007	108881.10	21359.90	15055.60	13467.70	10106.80	9373.40	9322.40	7908.30	7204.00	5933.44
Country	China	Italy	Germany	Turkey	Bangladesh	India	France	Belgium	Vietnam	Spain
2008	113367.60	23093.40	17062.00	13154.80	13472.21	10866.70	10226.50	9266.40	8499.80	7329.10
Country	China	Italy	Germany	Bangladesh	India	Turkey	France	Belgium	Indonesia	United Kingdom
2009	100479.30	18151.70	15505.70	14191.54	11312.00	11222.80	9316.90	7916.90	5660.90	4891.40

Source: compiled from WITS, Database, 2010

Table 1.8: Competitive ranks of Exporting Countries in the top Importing Countries (markets) of the World in 2009

(Trade Value in Million USD)

Rank	World	1	2	3	4	5	6	7	8	9	10
EU	World 79,647.48	China 35,594.00	Turkey 9,732.70	Bangladesh 7,132.83	India 5,712.73	Tunisia 3,148.85	Morocco 2,784.40	Vietnam 1,668.94	Sri Lanka 1,622.37	Indonesia 1,507.88	Pakistan 1,241.70
USA	World 66,795.36	China 25,366.61	Vietnam 5,224.58	Indonesia 4,031.29	Bangladesh 3,509.69	Mexico 3,508.40	India 3,054.12	Honduras 2,156.35	Cambodia 1,945.77	Pakistan 1,401.57	El Salvador 1,328.79
Germany	World 28,784.77	China 9,663.52	Turkey 3,528.64	Bangladesh 2,574.37	India 1,299.79	Italy 1,186.52	Netherlands 800.89	Indonesia 659.31	Romania 648.13	Vietnam 571.77	Tunisia 447.64
UK	World 20,825.31	China 7,264.27	Turkey 1,861.54	India 1,450.55	Bangladesh 1,402.18	Italy 914.33	Sri Lanka 878.96	France 687.98	Germany 605.2	Belgium 520.21	Netherlands 475.39
Japan	World 24069.83	China 20261.73	Vietnam 1007.43	Italy 706.04	Thailand 248.45	Korea, Rep. 202.91	India 192.71	Indonesia 152.95	Myanmar 149.26	United States 141.43	Bangladesh 120.55
France	World 19,509.83	China 6,297.66	Italy 1,918.93	Bangladesh 1,184.77	Tunisia 1,172.51	Turkey 1,163.32	Morocco 1,125.71	India 1,082.81	Germany 611.77	Belgium 522.52	Portugal 486.48
HKG	World 14,546.80	China 13,101.77	Italy 528.41	Japan 163.96	France 142.95	United States 55.56	Turkey 50.16	India 42.69	Vietnam 32.75	Germany 32.13	Korea, Rep. 27.61
Italy	World 14,590.71	China 4,211.05	Tunisia 1,025.14	France 1,020.88	Romania 991.87	Turkey 700.35	Spain 642.94	Bangladesh 540.92	India 490.45	Belgium 486.6	Germany 473.18
Spain	World 11,726.02	China 2,864.09	Italy 1,292.89	France 1,253.50	Morocco 1,154.66	Portugal 963.81	Turkey 900.74	Germany 616.32	Belgium 568.33	India 551.54	Netherlands 315.30
Belgium	World 8,381.60	China 1,869.11	France 1,146.78	Germany 926.19	Netherlands 893.65	United States 407.41	Belgium 378.45	Bangladesh 358.42	Tunisia 293.33	Spain 224.63	India 216.62
Netherlands	World 8,011.18	China 2,256.85	Germany 1,433.59	Turkey 585.49	Bangladesh 455.97	India 376.88	Belgium 354.78	Italy 333.58	Denmark 305.31	Poland 273.6	France 159.95
Canada	World 6,855.20	China 3,594.69	Bangladesh 619.17	United States 387.09	India 300.36	Cambodia 248.99	Vietnam 238.64	Mexico 238.09	Indonesia 160.2	Italy 138.97	Turkey 79.81
United Arab Emirates	World 2,394.53	China 1,066.61	India 357.54	Italy 188.68	Indonesia 72.71	France 63.44	Thailand 62.58	Bangladesh 56.03	United States 54.41	Turkey 48.44	Sri Lanka 47.32

Source: compiled from WITS database, 2010

1.6 Comparative positions of the world exporting countries in the top importing countries (markets) of the world in 2009

As discussed above that the top importers of the world and India's top destination markets (importing countries for India's apparel export) are shown in the table 1.3 & table 1.6 above respectively.

Table 1.8 indicates competitive ranks of exporting countries in the top importing Countries (markets) of the world and in turn, indicates India's competitors with relative ranks in the top importing markets of the world. China stands at the top position for exporting in these top import destination markets (importing countries) of the world.

Data in the table indicate that Import by US & EU markets constitute 17.81 % & 21.31% of world apparel import market respectively. In 2009 the highest exporter in EU apparel market is China with 44.69% share of total EU apparel import and India is at 4th place with 7.17% share in EU apparel products import. India's competitors are Turkey and Bangladesh besides China in EU apparel import market. It is also observed that in general India's competitors are either from Asia or European Union countries. Again from the table 1.8 above regarding import of apparel products in US from the world in 2009, it is seen that the highest exporter in the US is China with 37.98% share and India is at 6th position with 4.57% share in US apparel products import. From the data in this table, it is seen that India's competitors in the US market are China, Vietnam, Indonesia, Bangladesh & Mexico. As per the Table 1.8 statistics, more than 75% of India's export is to US & EU countries. Further, from the above table, it is observed that there is quite a substantial gap between India's export value and US & EU import markets (India's export is only 4.57% & 7.17% in these markets) as well as with respect to India's competitors in US & EU import markets. Hence, there is a large opportunities for Indian apparel exporters to increase their export in US & EU apparel markets (being largest markets of the world).

Further, apart from US & EU (as a whole) importing markets, it is observed that India's biggest competitor is China in the other top importing counties of the world. In addition to China, there are other competitors of India in the other top importing counties, as depicted in the Table 1.8. It is observed that in other importing markets such as Germany, UK, Japan, France, Hong Kong, Italy, Spain, Belgium, Netherlands, Canada and United Arab Emirates, India's positions/ranks are at 4th, 3rd, 6th, 7th, 7th, 8th, 9th, 10th, 5th, 4th and 2nd place. India's shares in these markets are only 4.5%, 6.9%, 0.8%, 5.5%, 0.29%, 3.3%,4.7%, 2.5%, 4.7%, 4.38% and 14.9%.

In these markets Indian apparel exporters can enhance competitiveness to increase the exports value in these markets as these markets are among the world top importing countries and there is substantial gap between India's export value and these top importing countries import demand as well as with respect to some of the India's competitors in these importing markets. Hence, there is a large market opportunities for Indian apparel exporters to increase their export in these importing countries, which have not been so much explored.

Conclusion

The structural adjustment has been done as per our requirement and special emphasis has been given on export to south Asian countries. Special emphasis should be given on policy and norms in export. Planning and implementation over the past years yielded the overall textile and garment industry good results. India's competitiveness can further be elaborated by using other parameters.

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Working Hours as an Influencing Factor Towards Work Family Conflict of Women Employees in it Sector in Chennai City

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Abstract: *The main objective of this study is to examine the impact of work life conflict of women employees in IT sector in Chennai with respect to the working hours. A convenience sampling technique was used to select women respondents. Quantitative as well as qualitative data were obtained using structured questionnaire. Demographic, socio-cultural factors and economic characteristics were used as explanatory variables while the dependent variable is work life conflict. A sample of 598 was used for the analysis. Cluster and correspondent analysis is administered to derive the findings. It has been found out that there is a direct proportional relationship between the working hours and the work life. Finally, based on the key findings, some workable recommendations are given.*

Keywords: *Work life conflict, women, working hours, Information technology sector.*

Introduction

An important issue facing our society is the changing work and family roles of Indian women. Because many women occupy both work and family roles their experience in work and family represent primary social contexts for examining women's lives. (McBride, 1990). Women today function within multiple roles simultaneously operating in both work and family domains as, a mother, a spouse, a housekeeper, and as well maintain a full time employment outside the home (McLaughlin, Melber, Billy, Zimmerle, Wintges and Johnson, 1988). The relationship between these dual roles has thus become a topic of interest among organizational researchers. In most studies researchers have found that carrying out these dual roles often lead to work family conflict for both men and women. The profound demographic trends has elevated the need to understand and manage the interface between work and family. The acquisition of a role, requires an individual to take personal as well as the formal expectations of a specified role or position .

Work and family are the two central domains framing the back bone of an individuals' life (Howard, 1992). They are work domain (employment) and non- work domain (family). These two inevitable institutions namely work and family historically coexist. But this separation between work and life began to fade with changes in societal demographics.

A full comprehension of the dynamics of work family conflict is a critical need for organizational individuals. There are different levels in which work family can be seen as an issue of conflict . In this sense conflicts between work and family are issues that progressive employees and organization require direct attention (Covin and Brush, 1991).

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The Context of Work life conflict in Indian Software Sector

One of the fastest growing business sectors that is contributing to an unprecedented economic growth in India since the 1990s, is Information Technology (IT). In the recent past, the Information Technology Enabled Services/Business Process Outsourcing (ITES/BPO) sector of India has been the center of attention of some research studies in the West. Hence, the present study focuses on software professionals for whom the boundary between work and life is generally thought to be distorted and tries to find out their perceptions regarding work life conflict. Work life conflict has become perceptible as a strategic concern for the management of human resources.

The Indian IT-ITES industry is on a high impetus direction. Rampant growth, however, has come with its own set of challenges. Therefore, the main concern of the present study is to provide information (vis-a-vis, identification of areas of work life conflict policy development and implementation that may require change; and enable them to respond to the changing needs of employees and also ensuring the awareness of the work life conflict policies) that would help the management of the IT companies to evaluate and redesign their current HR strategies in order to retain their existing employees and recruit new ones in a competitive IT sector environment being faced.

The total IT software and services employment in hardware sector as against 2.2 million in 2008-09 a growth of 4 percent YoY. This represents a net addition of 90,000 professionals to the industry employee base in 2009-10 .The indirect employment attributed to the sector is estimated to be about 8.2 million .

Back ground of the study

Work - family conflict occurs when work pressures and family pressures exists at the same time such that compliance with pressures in one domain (e.g., work) makes it more difficult to comply with pressures in another domain (family). Most work family conflict research to date developed and tested antecedents and out-comes of work / family conflict (Greenhaus and Beutall, 1985). Kopelman et al (1983) were among the first to systematically examine the construct of work family conflict. They began by defining three role conflict variables, work conflict, family conflict and inter role conflict. Work conflict and family conflict is the extent to which one experiences incompatible role pressures with regard to work domain and family domain respectively. Inter role conflict occurs when one experiences pressures of one role that are discordant with pressures in another role. Kopelman et al (1983) developed three scales to measure each of these constructs.

A number of other researchers (Greenhaus and Beutall, 1985) built upon Kopelman et al 's (1983) work by developing and testing additional models of work family conflict. For example based on a review of previous literature, Greenhaus and Beutall (1985) articulated three potential sources of work family conflict; time based conflict, strain based conflict and behavior based conflict.

Review of Literature

Work family conflict

Work interference family conflict occurs when work related activities interfere with home responsibilities and family interference work conflict occurs when familial activities and thoughts interfere with work responsibilities. Although strongly correlated with one another they are conceptually and empirically distinct constructs (Duxbury, Higgins, and Lee 1994; Frone, Russell, and Cooper, 1992).

Greenhaus and Beutall (1985) identified three major types of work family conflict. The first is time

Table 1: Employment in IT industry in India (in millions)

Year/Item	2001- 02	2002- 03	2003- 04	2004- 05	2005- 06	2006- 07	2007- 08	2008- 09
IT Services and Exports	0.17	0.21	0.30	0.39	0.51	0.69	0.86	0.92
BPO Exports	0.11	0.18	0.22	0.32	0.42	0.55	0.70	0.79
Domestic Market	0.25	0.29	0.32	0.35	0.38	0.38	0.45	0.50
Total Employment	0.52	0.67	0.83	1.06	1.29	1.62	2.01	2.21

based, time spent on role performance in one domain often precludes time spent in the other domain. The second work family conflict strain based conflict arises when strain in one role affects ones performance in another role. The last type is behavior based conflict which refers to incompatibility between the behaviors patterns that are desirable in the two domains.

Carlson et al (2000) also discovered that work involvement does significantly correlate with work to family conflict. Thompson and Ganster (1995) found that supervisor support reduced work family conflict. Anderson (1991) found that managerial support was negatively and significantly correlated with work to family conflict and family to work conflict while Frone, Yardely and Markel (1997) concluded that supervisor support was related to work to family conflict and not family to work conflict and co worker support was related to neither. High levels of family involvement (Duxbury and Higgins, 1991) spouse support (Aryee, 1992) have been found to be related to low levels of work family conflict.

Multiple roles have a negative effect that is imposed on women's health and well being. This may be manifested in the form of chronic fatigue and exhaustion and in some women more extreme psychological stress and depression (Green glass et al., 1988).

Organizationally relevant out comes include job satisfaction, urn over intentions (Greenhaus; Parasuraman, and Collins, 2000), Job distress (Grandley and Cropanzano, 1999). Multiple roles lead not only to increased obligations but also to increased privileges. Rewards such as self esteem, recognition, prestige and financial remuneration offset costs of work roles thus enhancing well being. Intention to withdraw from work force(Aryee, 1992) is a work out come which has been found to be related to high levels of work family conflict. Other indicators that focus on lack of general well being such as depression (Thomas and Ganster, 1995).

Validity and Reliability

Work Family Conflict: 0.923 [Reliability of scales is tested with cronbach alpha.]

Research Methodology

Research methodology is the frame work of any research work that explains as to the research design,

the data used, sampling technique applied, tools used for analysis and so on.

Research Design

The design applied in this study is conclusive type of descriptive research design. It is appropriate to use this method as this research describes the relationship between different variables and concludes as such. It tries to understand the behavioral differences of respondents. Besides, the view of researcher is not having any role in the conclusion of the study.

Data

Both primary and secondary data are used in this study to attain the objectives. The primary data of this study are first hand information collected from respondents regarding demographic background, like education, marital status, Number of children, and dependents, Working hours ,income level and designation. The secondary data are information about previous studies in role conflict of women across the world, among various sectors like nursing, academics, and other industries particularly in India, Tamil Nadu and Chennai. Indicators have been gathered from journals and magazines.

Structured questionnaire is used for gathering information from respondents that has been drawn on objectives of study and finally drafted based on pilot study. For testing the reliability, pilot study has been conducted by distributing questionnaires among 50 respondents. On the basis of their views and reliability of scales, questions have been modified and questionnaire has been so redrafted as to meet minimum value of reliability which has been tested further through survey among another 50 respondents.

Questionnaire

Set of questions pertaining to the objectives of the study is prepared with the help of previous studies conducted with reference to variables. Questionnaire consists of both qualitative and quantitative items. Moreover, apart from multiple choice questions, different types of scales are used to measure the respective variables.

Sampling

Since the population size is very large, sampling

technique is applied to select sample unit. In this study, convenience sampling technique is adopted for selecting the various IT firm and selecting respondents. Sample unit of this study is only women both married and unmarried employed in IT industry in Chennai city.

A total of 1000 questionnaires have been distributed to respondents but only 755 have been received after continuous follow-up. Among collected filled questionnaires, only 598 are in usable condition.

Table 2: Working hours and conflict groups

Role conflict based segments	Working Hours				
	Less than 8 Hours	9 Hours	10 Hours	Above 10 Hours	Active Margin
High conflict	19	40	45	10	114
Moderate conflict	61	109	88	53	311
No conflict	66	68	28	11	173
Active Margin	146	217	161	74	598
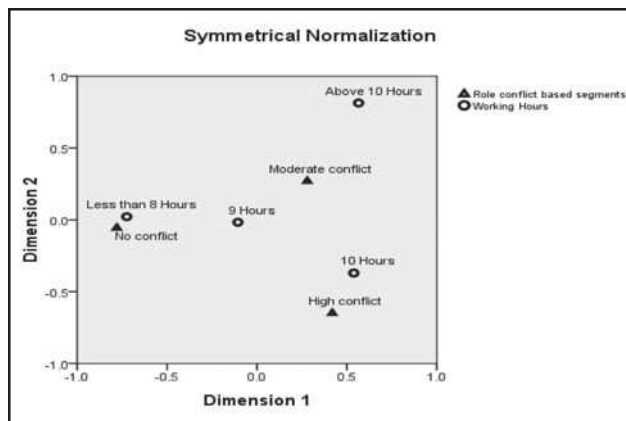
The Correspondent table shows that the majority of the high conflict segment is comprising of respondents who work ten hours per day immediately followed by respondents who work nine hours per day very few respondents who work eight hours per day are found to have high conflict.

The majority of the respondents who work for nine hours per day are found to be in the moderate conflict segment followed by respondents who work

for ten hours per day.

The least number of respondents who work for ten hours and above fall in the no conflict segment. There is a probability that as the number of hours increases the conflict level also increases.

The correspondent chart shows the association of the number of working hours with the level of conflict segment. High conflict is associated with ten hours per day nine hours , working hours with moderate conflict and less than eight hours with no conflict segment . The above ten hours per day is not associated with any of the conflict segment.

Conclusion

Thus the above Quantitative analysis and its Interpretation derives conclusive discussion on the nature and the intensity of the relationship between the demographic variables and its impact on the Work Life Conflict of Women Employees in IT Sector.

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Technical Efficiency of MFI's and its Determinants: An Empirical Study

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Abstract: *Micro finance institutions play an important role in the economies of developing countries like India, Pakistan and Bangladesh. Microfinance institutions (MFIs) unlike other financial institutions differ in its approach and motives. MFIs target people from economically weaker sections without any collateral requirements and their motive is more than just profit maximization. This study attempted to test the efficiency level of Indian micro finance institutions for the period 2010. Using non-parametric Data Envelopment Analysis (DEA) and parametric corrected OLS for data of 43 MFI's collected from the mix market. The study finds that the average efficiency score is very low at 0.315 and more than 65 percent of the MFI's below mean efficiency. The cost per borrower has significant influence in measuring efficiency of MFIs. The study also reveals that non-profit micro finance institutions have shown a high efficiency compared to profit organization.*

Keywords: *MFI's, efficiency, DEA approach, COLS approach, Factors influencing efficiency.*

Introduction

Micro finance institutions play an important role in the economies of developing countries economics like India, Pakistan and Bangladesh. Microfinance institutions (MFIs) unlike other financial institutions differ in its approach and motives. MFIs target people from economically weaker sections without any collateral requirements and their motive is more than just profit maximization (Masood and Ahmad, 2010). NABARD has been instrumental in the development and facilitation of various operational activities of the micro-finance sector at the ground level; involving all partners, viz., NGO, bankers, socially spirited individuals, other formal and informal entities and even government functionaries to help poor people to have access for smaller credits. Training and capacity building of partners, promotional grant assistance to Self Help Promoting Institutions (SHPI), Revolving Fund Assistance (RFA) to Microfinance Institutions (MFI), equity/Capital Support (CS) to MFI to supplement their financial resources and 100 per cent re-finance against bank loans for micro-finance activities are some of the key activities supported by NABARD. According to NABARD estimates on 31 March 2010; the total savings-linked to SHGs were at 69.53 lakhs and about 48.51 lakhs of credit-linkage to SHGs were facilitated, covering about 9.7 crore poor households under the micro-finance programme. Also, the share of bank loans outstanding to SHG to the percentage of loans outstanding to weaker sections by scheduled commercial banks, improved marginally to 16.3 per cent from 15.8 per cent from the previous year.

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Micro Finance Institutions

MFIs have been regarded as a significant tool for facilitating social inclusion, as they are uniquely positioned in reaching out to the rural poor. The Policy and Regulatory Framework has defined micro finance as, "the provision of thrift, credit and other financial services and products for very small amounts to the poor in rural, semi-urban or urban areas for enables them to raise their income levels and improve living standards". Many of the MFIs operate in a limited geographical area, have a greater understanding of the issues specific to the rural poor, enjoy greater acceptability amongst the rural poor and have flexibility in operations providing a level of comfort to their clientele. Also, the nature of these institutions is quite different from traditional financial institutions (such as commercial banks). MFIs are significantly smaller in size, often provide small collateral-free group loans and strictly limit their services towards poor households. Most MFIs are not-for-profit oriented organizations that depend on donor funds and share a common bond among its members. They act as financial intermediaries to poor households.

Following the RBI guidelines issued vide its circular dated 18 February 2000, to all scheduled commercial banks including RRBs; MFIs are availing bulk loans from banks for on-lending to groups and other small borrowers. On the basis of returns received from banks for the year 2009-10; SIDBI, 21 Public Sector Commercial Banks, 14 private sector Commercial Banks, 4 foreign Commercial Banks, 7 RRBs and one Co-operative Bank have been reported to have financed MFIs for on-lending to groups and other small borrowers to promote microfinance activities. Since 2006-07, NABARD has been compiling and analyzing the data on progress made in microfinance sector, based on the returns furnished by Commercial Banks (CBs), Regional Rural Banks (RRBs) and Cooperative Banks operating in the country. The banks operating, presently, in the formal financial system comprise Public Sector CBs (27), Private Sector CBs (22), RRBs (82), State Cooperative Banks (31) and District Central Cooperative Banks (370). Most of the banks facilitating the access to smaller credits to poor people have reported the progress made under the programme.

Review of Literature

Research studies measuring the efficiency of micro finance institutions have been extensive especially in the developing countries; but only limited number of studies has been reported in India.

Bassem (2008) investigation on the efficiency of 35 Micro finance institutions in the Mediterranean zone during the period 2004–2005 using the non-parametric Data Envelopment Analysis (DEA) found that eight institutions are relatively efficient, and the size of the MFIs has a negative effect on their efficiency. The medium size MFIs were found to be more efficient than the eminent MFIs. Lensink, Meesters and Hermes (2008) study on the trade-off relationship between the outreach to the poor and efficiency of microfinance institutions using 1300 observations and applied stochastic frontier analysis (SFA), found that outreach is negatively related to efficiency of MFIs. The authors concluded that MFIs are more efficient in countries with a better financial development. Haq, Skully and Pathan (2009) examination of the cost efficiency of 39 microfinance institutions (bank-MFIs, NBFI-MFIs, cooperative-MFIs and NGO-MFIs) using non-parametric Data Envelopment Analysis (DEA) in Africa, Asia and Latin America found that non-governmental microfinance institutions are the most efficient under production approach. Nieto, Cinca and Molinero (2009) applied Data Envelopment Analysis (DEA) to measure the efficiency of MFIs in relation to financial and social factors. The study explored the importance of social efficiency assessment and introduced two new indicators for measuring the social performance of MFIs: impact on women and a poverty index. Hassan and Sanchez (2009) study of MFIs in three regions: Latin America, Middle East and North Africa (MENA) countries, and South Asia countries, found that technical efficiency was higher for formal MFIs (banks and credit unions) than non-formal MFIs (nonprofit organizations and non-financial institutions). The study also concluded that the South Asian MFIs are more technical efficient than Latin American and MENA MFIs. Debdatta (2009) study among thirty six Indian Microfinance Institutions (IMFIs) using DEA approach, found that value of total assets; returns on assets, returns on equity, age and borrower per staff of MFIs have shown positive correlation with all efficiency measures. Masood and Ahmad (2010) examined of unbalanced panel data of 40 MFIs for the period of 2005-08 using Stochastic Frontier Approach (SFA) found that the mean

efficiency level of MFIs was 0.34 it is very low during the study period. The study also found that the operational experience (age) of MFIs is a positive determinant of efficiency while size is not. Masood and Ahmad (2010) concluded that southern states MFIs are more efficient than MFIs in others regions of India and unregulated microfinance institutions as more efficient compared to the regulated ones. Pankaj, Agarwal and Sinha (2010) examination of the financial performance of MFIs in India found that highly effective performing companies were following different business models and suggested that business model is a predictor of efficiency. Biener and Eling (2011) study using DEA among the sample of 20 micro-insurance programs in Africa, Asia, and Latin America from 2004 to 2008 found that technical efficiency is negatively correlated with size. Therefore, increasing size is not necessary for optimal or overall efficiency.

Need for the Study

MFI's are increasing regarded as an important tool for poverty alleviation and income generation and to provide collateral free loans to the low income and poor people in rural and urban. Measuring the performance of such strategies and programme is imperative to justify its implementation, identifying areas of improvement and for providing necessary impetus for the growth and development of MFIs for poverty alleviation. This study is therefore attempted to bring about a better understanding about the Indian Micro Finance Institutions and its performance. This study in a way would help us to identify the best performing MFI's in India for the period 2010. This study also aims to explore the factors that discriminate the efficient from the above average and below average MFIs in terms of efficiency and performance.

Objectives of the Study

The main purpose of this study is to measure the efficiency of the micro finance institutions in India for the year 2010. The secondary objectives are

* To measure the technical efficiency of micro finance institutions in India using DEA.
* To find out the relationship between technical efficiency and employee size, number of offices, number of active borrowers and cost per borrowers.
* To identify the factors influencing technical efficiency of micro finance institutions.

Methodoloy

The study is purely based on published data. The sample consists of 43 micro finance institutions identified for the year 2010. The complete data were collected from websites such as Mix Market, M-cril., etc. Among the 43 MFI's, 31 are from profit organization and remaining 12 are non-profit organization. The Selection of MFI's is solely based on the availability of data.

Data Envelopment Analysis

Data envelopment analysis (DEA) is a performance measurement technique which can be used for analyzing the relative efficiency of productive units, having the multiple inputs and multiple outputs. It is a non-parametric analytic technique which allows us to compare the relative efficiency of decision making units (DMU's) as benchmark and by measuring the inefficiencies in input combinations in other units relative to the benchmark. The DEA estimates the efficiency by solving a series of linear programming problem. The efficiency of each firm is measured by the distance from the frontier. The distance represents the amount by which all inputs could be proportionately reduced without a reduction in output. This is usually expressed in percentage terms by a ratio which represents the percentage by which all inputs could be reduced. Technical efficiency value ranges from 0 to 1. If a firm has an efficiency value as 1 then it is said to be fully technically efficient.

Analysis of Technical Efficiency

The technical efficiency measure reflects the ability of a firm to obtain maximal output from a given set of inputs. It will take a value between zero and one, and hence provides an indicator of the degree of technical efficiency of the firm. A value of one indicates the firm is fully technically efficient.

MFIs are financial institutions that provide credits (lending money) to poor self help group members through employees working in various branch offices. Therefore, the number of employee, number of branch offices, number of active borrowers, and cost per borrowers as input variables and gross loan portfolio is taken as output variable.

Table 1 shows the distribution of 43 MFIs in India based on its technical efficiency score and ranks using DEA method. Firstly, the micro finance institutions

Table 1: Technical Efficiency Score and Ranks of Micro Finance Institutions for the Year 2010

S.No.	Name of MFI	Efficiency Score	Rank	Efficiency Score	Rank
	Profit Org.				
1	Adhikar	0.276	17	0.276	13
2	AML	0.01	30	0.01	21
3	Arohan	1	1	1	1
4	Asirvad	0.002	39	0.002	27
5	Bandhan	0.051	25	0.051	18
6	BASIX	0.007	31	0.007	22
7	BFL	0.002	40	0.002	28
8	BISWA	0.005	33	0.039	19
9	Cashpor MC	0.003	37	0.774	8
10	CCFID	0.127	22	0.015	20
11	GU	0.751	10	0.582	10
12	Hope	0.158	21	0.285	12
13	KBSLAB	1	1	0.005	24
14	Mahasemam	1	1	0.175	15
15	Mahashakti	0.097	24	1	1
16	RGVN	0.563	12	1	1
17	RISE	0.038	28	0.256	14
18	Sahayata	0.002	41	0.006	23
19	Samasta	0.773	9	0.158	16
20	Sanchetna	0.102	23	1	1
21	Sarala	0.377	15	0.001	30
22	SCNL	0.003	38	1	1
23	SEWA Bank	0.471	13	1	1
24	SMSS	0.379	14	0.005	25
25	Sonata	0.774	8	0.955	7
26	SU	0.217	19	0.001	31
27	SVCL	1	1	0.002	29
28	Swadhaar	1	1	0.773	9
29	Swayamshree	0.256	18	0.102	17
30	Ujjivan	0.005	35	0.003	26
31	VFS	0.001	43	0.471	11
	Mean			**0.353**	
	Non-Profit Org.				
32	BJS	0.038	27	1	1
33	Chaitanya	0.285	16	0.259	11
34	ESAF	0.004	36	0.439	9
35	GK	0.005	34	0.599	6
36	GOF	0.175	20	0.151	12
37	GV	0.006	32	0.482	8
38	Janalakshmi	1	1	0.392	10
39	Mimo Finance	0.955	7	1	1
40	SKS	0.039	26	0.55	7
41	Spandana	0.015	29	1	1
42	Suryoday	0.582	11	1	1
43	Trident Microfinance	0.001	42	0.82	5
	Mean	**0.315**		**0.641**	

are divided into two categories on the basis of its functioning status. They are profit and non-profit organization.

Profit Organization: Among the 31 profit-for-MFIs, 6 institutions namely, Arohan, Mahashakti, RGVN, Sanchetna, SCNL and SEWA Bank are highly efficient.

The average efficiency score of profit-for-MFI is at 0.353 and there are only 5 MFIs having efficiency score above average.

Non-Profit Organization: The average efficiency score is at 0.641 which is comparatively higher than efficiency score of profit-for-MFIs. It is also found that 4 non profit-MFIs named BJS, Mimo Finance, Spandana and Suryoday are highly efficient and Trident non-profit-MFI is the only MFI where the efficiency score is greater than the mean score.

To summarize from the table 1, MFIs named Arohan, KBSLAB, Mahasemam, SVCL, Swadhaar and Janalakshmi are ranked higher in the order based on its high efficient micro finance institutions in India for the year 2010. Among these six most efficient MFIs, except for Janalakshmi which is a not-for-profit MFI, all other are profit organizations. Mimo Finance (95%), Sonata (77%) and GU (75%) standing the next levels of is efficiency. The overall average efficiency score is lowly at 0.315 and the efficiency of more than 65 percent of the MFIs are below the average mean. Overall, the efficiency of the Indian micro finance institutions are very low and compared for-profit-MFI, non-profit-MFIs are efficient.

Segmentation of MFI's on the Basis of TE Score

On the basis of its technical efficiency, sampled MFIs can be categorized as highly efficient, above average and below average as mentioned below.

- Highly efficient – TE score is equal to 1
- Above average – TE score is greater than mean
- Below average – TE score is lesser than mean

Table 2 shows the segmentation of MFIs based on TE score. Overall, 6 MFIs (14%) are highly efficient, 9 (21%) MFIs efficiency is above average (greater than overall mean of 0.315) and 28 MFIs (65%) efficiency is below average (lesser than overall mean of 0.315).

Among for-profit-MFIs, 6 MFIs are highly

Table 2: Classification of MFI's Based on Efficiency

	Overall		Profit organization		Non-Profit organization	
Parti-culars	Frequ-ency	Perce-ntage	Frequ-ency	Perce-ntage	Frequ-ency	Perce-ntage
Highly Efficient	6	14	6	19	4	33.33
Above Average	9	21	5	16	1	8.33
Below Average	28	65	20	65	7	58.33
Total	43	100	31	100	12	100

efficient, 5 MFIs efficiency is above average (greater than for-profit mean of 0.353) and 20 MFIs efficiency is below average (lesser than for-profit mean of 0.353). Similarly among non-profit-MFIs, 4 MFIs are highly efficient, 1 MFI efficiency is above average (greater than for-profit mean of 0.641) and 7 MFIs efficiency is below average (lesser than for-profit mean of 0.641). From this table, inferred that for the year 2010, the efficiency of non-profit-MFIs are comparatively higher than for-profit-MFIs.
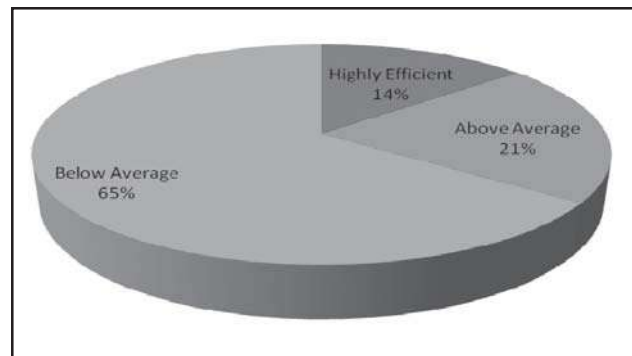
Figure 1: Frequency Distribution of India MFI's in terms of technical efficiency

The table 3 shows that the correlation coefficient between the input variables such as no. of employees, cost per borrower, no. of office and no. of active borrower. From the matrix, the association of number of offices to personnel is at 0.930; number of active borrowers to personnel is at 0.969; and number of borrowers to number of offices is at 0.985 with a significant level of 1 percent. This shows that there is some relationship between independent variables.

Table 3: Correlation between the Input Variables

		Personnel	Cost per borrower	No. of office	No. of active borrower
No. of Employees	Pearson Correlation	1			
	Sig. (2-tailed)				
Cost per borrower	Pearson Correlation	-.163	1		
	Sig. (2-tailed)	.296			
No. of office	Pearson Correlation	.930**	-.219	1	
	Sig. (2-tailed)	.000	.158		
No. of active borrowers	Pearson Correlation	.969**	-.192	.985**	1
	Sig. (2-tailed)	.000	.216	.000	

**Correlation is significant at the 0.01 level (2-tailed).

Determinants of Technical Efficiency

The technical efficiency score was taken as dependent variable and no. of employees, cost per borrower, no. of office and no. of active borrower, loan loss, operational self sufficiency, profit and yield were taken as independent variables.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.552	.305	.288	.31712	1.936

The r^2 value for the relationship is 0.305 which means that about 30 percent of variance in the efficiency score of MFIs have been explained by the number of employees, cost per borrower, number of office and no. of active borrower, loan loss, operational self sufficiency, profit and yield. The adjusted R^2 is also 0.288 which means there is no much error contribution in r^2 calculation.

Table 5: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.809	1	1.809	17.988	0.000
	Residual	4.123	41	0.101		
	Total	5.932	42			

The F value in the analysis of variance is 17.988 significant at 0.000 levels. This supports that the influence of no. of employees, cost per borrower, number of office and no. of active borrower, loan loss, operational self sufficiency, and profit and yield calculation on the efficiency score of MFIs is very high.

The regression line can be written as efficiency score = 0.552* Cost per borrower. Hence Cost per borrower is an appropriate determinant of the efficiency of MFIs.

Table 6: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.014	.091		-.150	.881		
	Cost per borrower	.000	.000	.552	4.241	.000	1.000	1.000

Factors Discriminating Efficienct Firms from Others

Discriminant analysis was used to find out the factors that discriminate efficient firm from others. The micro finance institutions are classified into highly efficient, above average and below average. No. of employees, no. of offices and no. of active borrowers, cost per borrowers were taken as independent variables.

Table 7: Eigen values and Canonical Correlation

Function	Eigen value	% of Variance	Cumulative %	Canonical Correlation
1	.773	94.0	94.0	.660
2	.050	6.0	100.0	.217

The Eigen value for the first function is very high when compared to the second function (Table 7). The first function describes 94% of variance for MFIs. The Eigen value for the second function is very low and it describes only the remaining 6% of variance. To understand more from the discriminant function, canonical correlation was used. The canonical correlation between the first function and four independent variables is very high 0.660 compared to the second one at 0.217.

Table 8: Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	0.537	23.920	8	0.002
2	0.953	1.863	3	0.601

Table 8 shows Wilks' lambda, the chi-square value, degrees of freedom and its significance level. The small values of Wilks' lambda indicate the strong group differences among mean values of 4 determinants. The significance value of 0.002 indicates that the group difference is significant at one percent level.

Table 9: Structure Matrix

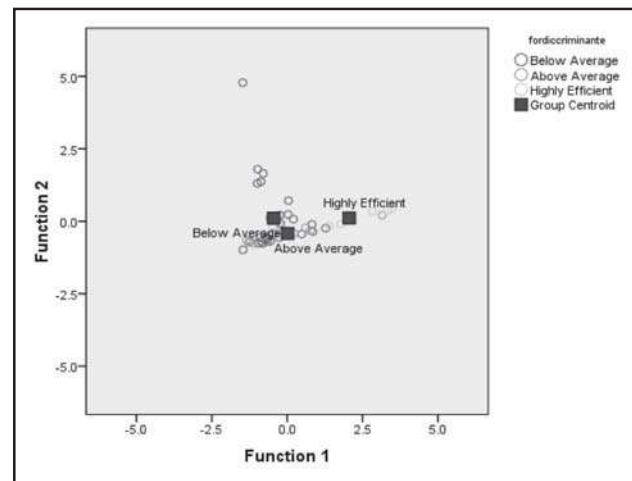|	Function	
	1	2
No. of employees	.966*	.152
Cost per borrower	-.226	.955*
No. of office	-.220	.902*
No. of active borrowers	-.219	.877*

The structure matrix (Table 9) indicates that two functions can be formed for the three clusters. The two domain functions can be written by using structure matrix table, viz. Z1 and Z2.

The functions are Z1 = 0.966 X1,

Z2 = 0.955 Y1 + 0.902 Y2+0.877Y3

Where X1 = No. of Employees, Y1 = Cost per borrower Y2 = No. of office and Y3= No. of active borrowers.

The first function is the function of number of employees (0.966). As already stated, the first function describes about 94% of the variance of the population. This means that these three segments differ significantly in number of employees.

Figure 2: Discriminate Plot

The discriminant diagram (Figure 2) shows that three segments are different groups having clear demarcation and the segments differ mainly on function one. Hence, it can be inferred that the characteristics of three segments are different with respect to first function variables.

The discriminant function two distinguishes between one and three clusters only.

As there are three segments, two discriminant functions can be formed by taking all the 4 determinants. From the territorial map (Figure 3) it is clear that function one distinguishes between segments one (below average), two (above average) and three (highly efficient).
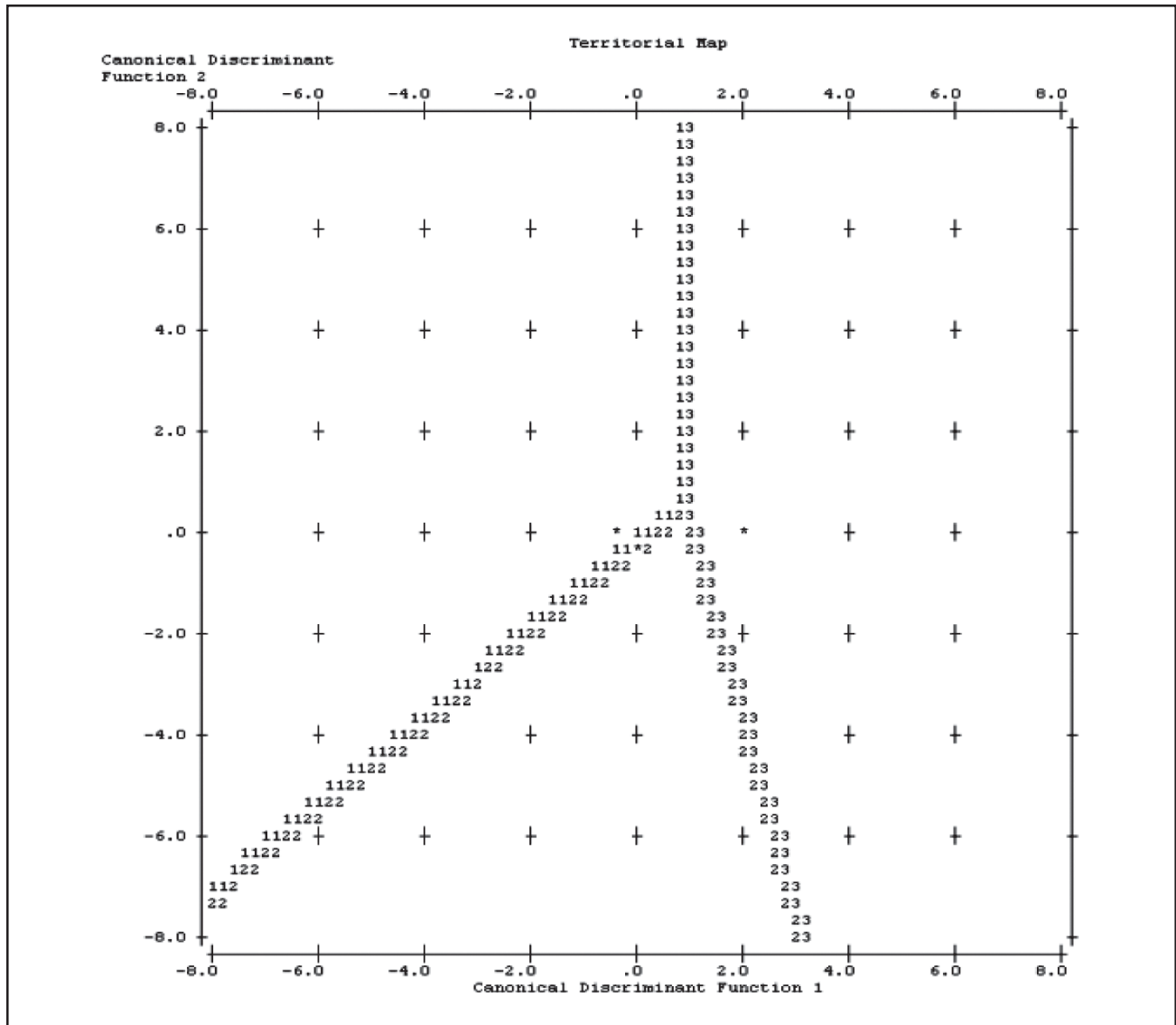
Figure 3: Territorial Map

Efficiency Estimation Using Cols Method

DEA has been regarded as a nonparametric counter-part of the corrected ordinary least squares (COLS) model. This result bridges the conceptual and philosophical gap between DEA and regression methods to frontier estimation, and paves a way to a stochastic nonparametric methodology for frontier estimation. In this case, the gross loan portfolio was taken as dependent variable and the no. of employees, no. of offices and no. of active borrowers, cost per borrowers were taken as independent variable.

The actual/corrected predicted column is the technical efficiency score for all micro finance in India for the year 2010. The rank is assigned based on technical efficiency score. As per COLS model CCFID is ranked no.1 followed by AML and BASIX respectively but, it is for DEA Arohan, Mahashakti, RGVN, Sanchetna, SCNL and SEWA Bank are highly efficient. Compare to both DEA and COLS models the efficiency score is differing and MFI also differing, the efficiency levels of other firms are very low in the both two models.

Table 10: Efficiency of MFI's Applied Cols Method

Name of the MFI	Predicted	Residuals	Corrected Predicted	Actual	Actual/ Corrected	Rank
Adhikar	566702064.4	-225077818	3722491750	341,624,246	0.092	31
AML	10242134602	3005617190	13397924287	13,247,751,792	0.989	2
Arohan	1512623794	-614179470.5	4668413480	898,444,324	0.192	21
Asirvad	1783832853	-772940280.8	4939622539	1,010,892,572	0.205	18
Bandhan	24482740653	590384691	27638530339	25,073,125,344	0.907	4
BASIX	9595237879	2892961768	12751027565	12,488,199,647	0.979	3
BFL	1803143741	-787254947.6	4958933427	1,015,888,793	0.205	18
BISWA	44653774421	-3546281580	47809564107	41,107,492,841	0.860	5
BJS	300530863.8	-104204744.8	3456320550	196,326,119	0.057	37
Cashpor MC	878370054	-51272092.97	4034159740	827,097,961	0.205	18
CCFID	31426013288	3155789686	34581802974	34,581,802,974	1.000	1
Chaitanya	1421203530	1648753835	4576993216	3,069,957,365	0.671	7
ESAF	437353123.5	-174516958.5	3593142809	262,836,165	0.073	35
GK	184282621.7	-123532866.7	3340072308	60,749,755	0.018	40
GOF	3112173398	-730718114.7	6267963084	2,381,455,283	0.380	13
GU	782764834.8	-300316924.8	3938554521	482,447,910	0.122	27
GV	182137138.6	-139998713.6	3337926825	42,138,425	0.013	42
Hope	246902748.4	-153777758.4	3402692434	93,124,990	0.027	39
Janalakshmi	2235808824	-140056219.3	5391598510	2,095,752,605	0.389	11
KBSLAB	2125666931	379386592.7	5281456617	2,505,053,524	0.474	9
Mahasemam	506691615.7	-220966239.7	3662481302	285,725,376	0.078	34
Mahashakti	631477074.6	-274472381.6	3787266761	357,004,693	0.094	30
Mimo Finance	562457949.6	-133945945.6	3718247636	428,512,004	0.115	29
RGVN	539526309.3	-35479197.25	3695315995	504,047,112	0.136	25
RISE	376549678.5	-70794291.51	3532339364	305,755,387	0.087	32
Sahayata	6732559996	-1532438613	9888349682	5,200,121,383	0.526	8
Samasta	396709049.5	-149090676.5	3552498735	247,618,373	0.070	36
Sanchetna	1508001463	304828536.6	4663791149	1,812,830,000	0.389	11
Sarala	1937525238	-249186905.3	5093314924	1,688,338,333	0.331	14
SCNL	612929199.4	270293140.6	3768718885	883,222,340	0.234	16
SEWA Bank	929036811.2	-347878811.2	4084826497	581,158,000	0.142	24
SKS	218868651.2	-114395238.2	3374658337	104,473,413	0.031	38
SMSS	5773404886	478039662.5	8929194571	6,251,444,548	0.700	6
Sonata	726633667.4	-223523392.4	3882423353	503,110,275	0.130	26
Spandana	979235416.5	-213863689.5	4135025102	765,371,727	0.185	22
SU	1682043429	-557175505.7	4837833115	1,124,867,923	0.233	17
Suryoday	170173246.8	-150589737.8	3325962933	19,583,509	0.006	43
SVCL	1945347599	-551205545.5	5101137285	1,394,142,054	0.273	15
Swadhaar	436100291.8	-151151247.8	3591889978	284,949,044	0.079	33
Swayamshree	204202615.6	-155990916.6	3359992302	48,211,699	0.014	41
Trident	873565920	-404170302	4029355606	469,395,618	0.116	28
Ujjivan	1714148707	582096428.8	4869938393	2,296,245,136	0.472	10
VFS	424610842.3	92295596.73	3580400528	516,906,439	0.144	23
				Mean	**0.289**	

Conclusion

The study finds that the average efficiency score is very low at 0.315 and more than 65 percent of the MFI's are operating below mean efficiency. The study also reveals that non-profit micro finance institutions have more efficiency than profit motive MFIs. The correlation analysis shows there are some relationship between independent variables. After removing inter collinearity the cost per borrower is considered as the only influencing factor in measuring efficiency of MFIs in gross loan portfolio. The number of employees in MFIs is the discriminating factor which discriminates between high efficient and low efficient firms. The efficiency score obtained from corrected OLS is less than DEA approach.

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SOCIAL ENTREPRENEUSHIP: CHALLENGES OPPORTUNITIES

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Sarita Das**

Abstract: *This paper aims to uncover the challenges and threats that social enterprises face, and identifies the potential remedies that can be adopted to promote social entrepreneurship. Social Entrepreneurship is an emerging field that offers opportunity to young professionals to create societal/economic value on a sustainable basis. According to some reports, globally this is the fastest growing sector and perhaps the only sector that is creating gainful employment worldwide. Vocational choice. In a country like India, where barely 6-7% of the economically active workforce is in the "organized sector", there is a dire need to divert the managerial talent to develop ventures which can add/create value to the rest of the "informal sector" (that accounts for 60% of India's GDP, 68% of income, 30% of agricultural exports, and 40% of manufacturing exports).*

Keywords: *social enterprise, community enterprise, entrepreneurship, non profit organizations, Employment.*

Introduction

The most powerful source in the world is the big idea, but only if it is in the hands of a good entrepreneur. This can move the world – Bill Drayton.

This Research in focus is devoted to the essence and characteristics of social entrepreneurship as a new global phenomenon, the policy objectives behind social entrepreneurship programmes and their impact on long-term policy decisions, including in the cultural sector. "A social entrepreneur is a type of entrepreneur who relies on innovation to improve the world through market solutions. Social entrepreneurs use their skills and creativity to try and solve an urgent social problem, with the goal being to make a positive impact." Social entrepreneurs drive social innovation and transformation in various fields including education, health, environment and enterprise development. They pursue poverty alleviation goals with entrepreneurial zeal, business methods and the courage to innovate and overcome traditional practices. A social entrepreneur, similar to a business entrepreneur, builds strong and sustainable organizations, which are either set up as not-for-profits or companies." Social entrepreneurship overcomes the gap between the business and the public sectors, as it is connected to the "non-profit" or the "third" sector, as well as to the concept of the "social economy", with emphasis on objectives to serve communities and society rather than generating a company's profit.

Research Design

In this study three social enterprises participated with the aim of identifying the key challenges and threats that they faced from inception to present and potential future threats they envisaged. The research data were generated in qualitative semi structured interviews with the leaders of the four social

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enterprises as they are assumed to have rich in-depth knowledge of the issues that I wanted to explore. The interviewees were purposively selected from New Delhi for the uniqueness of the organization in either its operations or its history. The interviews lasted between 45 minutes to 1 hour. To augment the qualitative the Challenges in Social Enterprises interviews, data was also gathered from an attendance to a seminar that was set up by the IP University with the theme *"Social Enterprise and the Community"*. This seminar involved key speakers around social entrepreneurship, group discussions on the implications and challenges faced by social enterprises and a question and answer session with experts in the field. Part of the data used in this paper centres around discussions.

Objectives of the Study

Social entrepreneurs are visionaries who see beyond the usual. They solve social problems using synergetic approaches where the result is much higher than just the sum of individual ideas. They have an impact because they collaborate globally by investing time and creativity to change policies, legislation and frameworks. The most important policy objectives results of social entrepreneurship programmes and projects are:

- Creating new jobs;

- Using regional resources in a creative and effective manner;

- Empowering to people to change their lives, to get motivated.

Characteristics of Social Entrepreneurship

- Explicitly formulated mission to create and sustain social value and to benefit the communities.

- High degree of economic risk and autonomy in activities related to producing goods and/or selling services;

- Pursuit of new opportunities and exploration of hidden resources to serve that mission.

- Quest for sustainable models, based on well elaborated feasibility study;

- Ongoing engagement in innovation, adaptation and learning;

- Decision-making power not based on capital ownership;

- Participatory and collaborative nature involving various stakeholders;

- Limited distribution of profit and minimum amount of paid work;

- Change opportunities lying in the hands of every individual.

Globally, social business enterprises are active mainly in the social, environmental, human rights and gender equality areas. Examples include: street children; children's health; health insurance for disadvantaged people; housing; educational opportunities; poverty in degraded urban areas; ageing and the elderly; migrants and ethnic minorities; work and employment; climate crisis; pollution problems; clean drinking water; empowerment of women; human rights; gender equality; digital divides. Social entrepreneurship initiatives and the cultural sector

If social entrepreneurs are driven not by money but by content, risk-taking, implementing innovative ideas, fulfilling social missions, could then artists be considered as a type of social entrepreneurs? Painters, actors, musicians, writers and all other cultural professionals always look beyond the usual, they create and take actions, use their imagination to make something new. It is important to outline that entrepreneurs are those who not only invent and implement an innovative idea, but bring it to an economically successful end, considering the market viability and the positive financial impact on community members.

The Challenge of Social Entrepreneurs

I have briefly illustrated what these challenges are:

1. The first challenge has to do with **governments.** The majority of them have yet to recognize social entrepreneurship as a legitimate field of endeavor. This recognition is the sine qua non for finding ways to promote it through fiscal and legislative incentives, including the review of tax laws, the elimination of burdensome regulations, arbitrary decision-making and other onerous requirements and inefficient practices that hamper social entrepreneurs.

2. The second challenge is to encourage **businesses** to discover the competitive advantages offered by working in partnership with social entrepreneurs. From a financial perspective, reaching untapped markets can be greatly facilitated by linking with social entrepreneurs who have spent decades designing, implementing and refining innovative ways of bringing previously excluded groups into the marketplace. From a human resources perspective, the ability to attract top talent is a major challenge for companies. But the best and the brightest today are looking for more than impressive salaries and stock options. They want something more – something that gives meaning to their work and their lives. Supporting social entrepreneurs in different ways shows that companies care about more than the bottom line. Finally, corporate social responsibility is not about setting up separate corporate foundations to reach excluded populations through top down programs that compete with social entrepreneurs. Nor is corporate social responsibility about relegating the "social" work to the corporate foundation while the corporation carries on its business as usual. Working with social entrepreneurs should be part of the core business strategy of every company.

3. The third challenge for social entrepreneurs relates to **foundations and philanthropists** who should be the ones catalyzing social transformation by supporting the social innovators. Foundations and high net worth individuals are certainly well placed to engage in that process, as they are free of two forces that dominate the decisions of governments and business respectively –the voting booth and the financial bottom line. But many foundations and philanthropists seem content to fund demonstration projects that they hope will produce dramatic results in 24 months.

   No social entrepreneur transforms a system in that time! It takes years – even decades. We don't need more demonstration projects…we need support for scaling up successful social innovations. Social entrepreneurs have developed the metrics to prove what they do has results. So stop reinventing the wheel.

4. Then there are **multilateral and bilateral organizations.** Over the last decade there has been a strong call for their reform to render these organizations better equipped to respond to the challenges of the 21st century. Strong criticism has been leveled at multilateral financial institutions, particularly those responsible for finance, development and trade, for their failure to engage civil society and interest groups in consultations on their policies. Some institutions have responded by devoting time and energy to dialogue with non-state actors. But more needs to be done. We are in an interesting phase of new thinking and experimentation, and this is where these institutions have a vital and catalytic role. They should embrace risk as a key opportunity for global renewal, and make it a priority to spot and legitimize those who have the capacity to imagine and the ability to implement what they imagine through disciplined innovation.

5. The **academic** sector, too, presents a challenge for social entrepreneurship. No doubt there have been important strides, particularly in the context of university education. But we are barely scratching the surface of instilling entrepreneurial thinking in students from a young age. And while we all know that entrepreneurship is not something to be learned out of a book, it must be cultivated. The entrepreneurial mindset has been described by the following six characteristics: commitment and determination; leadership; opportunity obsession; tolerance of risk, ambiguity and uncertainty, creativity; self-reliance and ability to adapt; and motivation to excel. How well are our schools doing to instill these characteristics?

Finally, social entrepreneurs must work together to build the field through the establishment of a professional esprit de corps that moves them beyond their own goals and initiatives to a larger common purpose – one that is none other than working across sectors to create the renewed institutions that can respond to our unprecedented global challenges In sum, I have attempted to provide an overview of what needs to be done for each of these sectors if they are to support the growth of the field of social entrepreneurship? What are the most important things that government must do, that business must do, that multilateral and bilateral organizations, foundation and philanthropists, the academic sector must do to support social entrepreneurship? Because those key areas must be collectively identified by

those of us from all sectors that are committed to building the field – and most of all, by its practitioners - we are using the opportunity of this Global Summit to highlight those key priority areas for each sector. Tomorrow you will have the opportunity to identify those priorities – and consequently, a collective direction we can take together to scale the field.

Literature Review

Recently Google announced it is setting aside one percent of its profit and equity — up to $175 million over the next three years — to "make the world a better place." At about the same time, Bill Gates gave a highly publicized speech to the World Economic Forum that called for a "creative capitalism" that uses market forces to fight global poverty. These are but two of the most visible examples of a new business strategy called social entrepreneurialism. It is a strategy that every business needs to consider to be relevant to today's complex world. Social entrepreneurs use cutting-edge, innovative business methods to promote positive social change. While profit is still the primary yardstick for assessing business, social entrepreneurs also measure the extent to which business makes a positive impact on society. Traditional nonprofits and citizen groups have been mainly distinguished by their benevolent *intent*. In contrast, social entrepreneurs stand out by their pragmatic emphasis on getting *results*. Perhaps once it was enough to want to do good. Now it is necessary to do good in the most effective ways possible. Social entrepreneurs make a difference by applying original business strategies. For example, Vikram Akula, the McKinsey alumnus who founded SKS Microfinance, has made microloans to villages in India, using sophisticated finance techniques and profit to promote social change for poor women. Also, Ashoka is a nonprofit that uses a social venture capital approach to support other social entrepreneurs. Its *Change makers* program employs an open source strategy via an online platform to instigate "collaborative competitions." Just as open source proved to be an ingenious method for stimulating software development, now it is used to bring together the best minds to make a positive difference in the world. The idea of social entrepreneurship has been around since the 1960s, becoming more popular in the 1990s. Anyone with a good memory for business and who has taken a course in business ethics will remember Milton Friedman's classic criticism of this idea in his 1970 New York Times

Magazine article, "The Social Responsibility of Business is to Increase its Profits." Friedman argued that executives should not divert profit from stockholders to social causes. The primary reason is that the money belongs to the shareholders to spend as they see fit. But also Friedman claimed that business executives know how to run their businesses, not how to fix social problems. Social Entrepreneurs need to question the status-quo and be the agents for change in the world, but change is not always easy. Often as social entrepreneurs, we can focus on the change we want to see in the world but I think the first place we need to start is the change we want to see in ourselves. "You must be the change you want to see in the world" Mahatma Gandhi. As we learn to be more introspective and make the necessary changes in our lives, it will give us the skills and abilities to bring change to the world.

Life cycle and the issue of scale

Leadbeater outlines that the voluntary sector is often seen to consist of organizations that are" slow moving, amateurish, under-resourced and relatively closed to new ideas." Social entrepreneurial organizations are different. He discovered some "vital ingredients that promote innovation" in his exploratory study on five social entrepreneurs in the UK that do not correspond to that image and that are similar with regard to all of these organizations:

1. "At the heart of all these projects stands a dynamic social entrepreneur, who drives the Project on. Without this central figure none of these projects would have got started. However, the mere presence of a social entrepreneur will not be enough to create an Entrepreneurial social organisation."

2. The creation of flat and flexible organizations with an open-minded setting

3. Strong consumer orientation

4. "Successful social entrepreneurs create a cycle of development that goes through several stages."

Leadbeater depicts in the following the way change makers manage birth, growth and maturity of their social entrepreneurial organization.

Social entrepreneurs' cross-sectoral activities

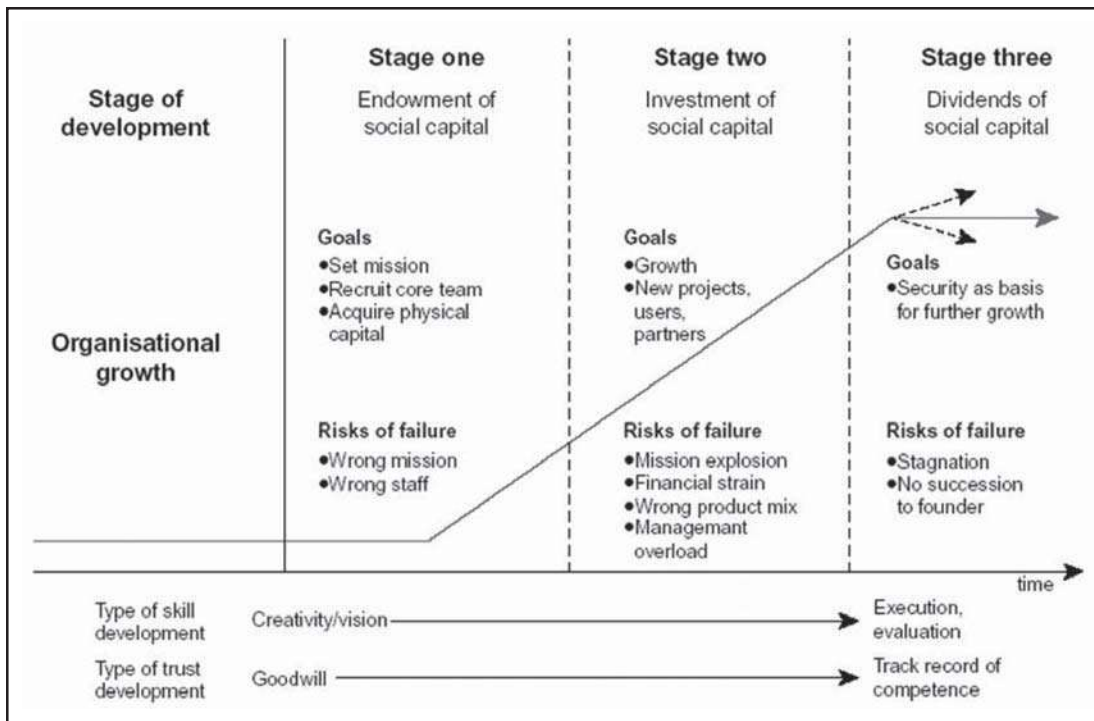Social entrepreneurs usually work interdisciplinary and are highly collaborative. In his

Figure 1: The life cycle of the social entrepreneur

Pioneering work "The rise of the social entrepreneur" (1997), Charles Leadbeater, British Journalist with a high expertise in social entrepreneurship assigns to social entrepreneurs a power of bringing together the relevant players of different sectors in order to implement the social project successfully.

This observation is valid with regard to four aspects:

- The variety of sectors in which social entrepreneurs manifest social innovations.
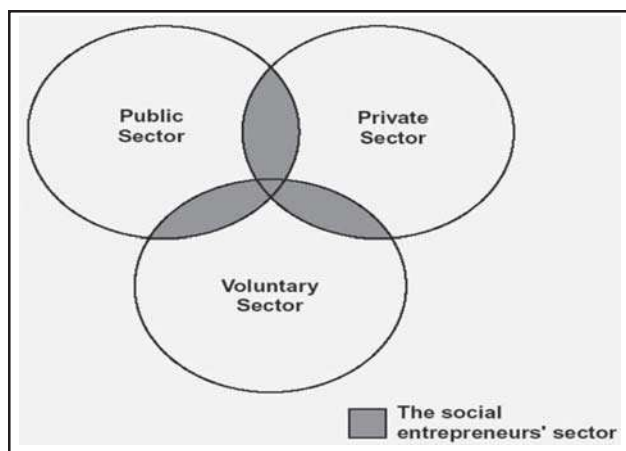

Figure 2: Sources of social entrepreneurship

- The mentioned cross-border collaborations70 among commercial, governmental and non-profit organizations.

- The blur of borders among the sectors: businesses in the private sector intending to become more socially responsible and non-profit organizations opening up to professional management.

- SOEs and NPOs as partners of the welfare state have proven a high significance e.g. in the USA in Public-Private-Partnerships to sustain social services.

According to the understanding in this paper, social entrepreneurs are dominantly part of the social or third sector due to their primary social mission and purpose even though socially entrepreneurial activities in the other sectors also exist. Definitive assignment to one sector or another is partly difficult, e.g. in the case of Fair trade or other forms of social enterprise. Researchers thus talk about the management of the double or even triple bottom line and mean the combining of social , financial and environmental issues.

5 Steps to making change happen

1. Understand your 'why'

This is a major factor to you being successful in the change you want to see. It is your purpose or commitment to a process that will eventually determine your outcome. Write down what your 'why' is and refer back to it, so you have the motivation to change. When the challenges come, you can refer back to your 'why' because this will become your anchor. Build a foundation of motivation and commitment before you even think about making changes.

2. Challenge the comfort-zone

All of us get a sense of comfort and security from doing what we've always done, even if it isn't working for us. We all know the definition of insanity – "Insanity: doing the same thing over and over again and expecting different results" Albert Einstein. Researchers Robert Kegan and Lisa Lahey call this "immunity to change." We have competing commitments to change – on one side there is our passionate commitment to change but this is counterbalanced by an equally powerful competing commitment to keep doing what you are comfortable doing.

This is an easy way to find your competing commitment. Think about the change you really want to make and ask yourself what are you doing or not doing to undermine that initial commitment. What is it costing you to continue doing the same thing over and over?

3. Be Specific about the change you want

Saying something like "I want to be more organized" is a recipe for failure because it is too general. Say something like "I am going to spend 10 minutes everyday writing a to do list for the day" or "I'm going to spend a day organizing my office and finding a place for everything."

4. Establish a support network

Many of us have an idea in our heads that "I can do it on my own." The fact is though, that you are more than likely to actually implement change if you have others alongside you who are trying to do the same thing. You can connect through the challenges, learn from others, and feel part of a community. The community also serves as a reminder that this is important in your life. On the flip side of this, stay away from small-minded people who want to stamp on your dreams because their intent is to hold you back with them.

5. Believe

Your belief will develop your faith. You can't change your behaviour without first changing your belief. Believe that you can and challenge any thoughts that say you can't. Get rid of the doubt and the fear of failure because these things will always hold you back.

The average person launches a change effort six separate times before it finally takes. Change is hard. It can even be painful. You will experience failure at times but it is through our failures that we can find success.

As social entrepreneurs, you may be seeking change for yourself so you can be a more effective leader or for the social problem that you have identified.

Cultural Implications

This research identified instances when there is socio-cultural resistance from either within, employees resisting changes like managers undermining strategy or outside or from the public or other stakeholders resisting changes, like unhappy locals. Apart from highlighting the potential for conflict in social enterprises, these findings identified the need for social enterprise leaders to adopt different strategies for diffusing such situations through consultation or involvement of most stakeholders at most stages. This highlights the diversity of knowledge and skill that a leader of a social enterprise should posses as there are complex management decisions that need to be made. This boils down to the training highlighted above that a social enterprise leaders need to undergo in order to succeed in handling these situations.

Other challenges and observations

Attitude of mistrust of social entrepreneurship by most grant givers in the social sector has been widely documented. This research highlighted a change of attitude as most traditional grant givers are now being interested in how the organization would fund their future programs without further

grant finance. This *nudging* of social organisations toward social entrepreneurship symbolizes the changing attitudes towards entrepreneurship from all spheres of the social sector. In the yesteryears it was rare for social organisations to acquire funding for capital projects from most donors and grant givers (Hind 1995). This could be signaling the demise of reliance on grants and donations in the social sector and a concerted push for social entrepreneurship in most if not the whole social sector.

Social entrepreneurship might be a relatively new phenomenon, having blossomed in the late 90s. However for about one and a half decade that the UK has seen its growth, the sector remains firmly attached to government, considering government involvement in most financing, support organisations and policy. From this study it is evident that the control still Challenges in Social Enterprises held by the government in determining the direction of this sector is enormous. Equally the sector is also reliant on the national authority for most of its needs. This might seem good at the surface, but it is a weakness as the sector might suffer in the case of a change in government regime, that is if the alternative government does not fully support social organisations. It is not only about the social enterprise sector growing but equally maturing, that is developing structures and institutions that are emancipated from the government. This will enable survival and continuation in the case of any changes in the operational environment.

Recommendations

- For social enterprises to develop entrepreneurial, a shift in paradigm to encourage social enterprises to accept and embrace business risk might help. This will help avoid crowding of social enterprises in the basic entrepreneurial activity.

- There also need to be an extensive training programs in business management especially strategy to enable social entrepreneurs to plan accordingly and be able to survive most of the challenges of the market place. Apart from the business skills, such training would equip them with confidence to venture *deeper* into riskier markets. There is also a need to designing of focused and shorter management courses aimed at practising social enterprise leaders.

- A continued drive to promote local support organisations to foster and assist emerging social

entrepreneurial activities and also to encourage social organisations to be part of such support groups and organisations and expansion of such support bodies nationwide.

- There should be a drive to strengthen structures outside the government to support social enterprises to function independent of the state apparatus. This could be by giving more power to regional social enterprise support and representative groups.

Conclusion

This paper highlighted the problems and threats that the social sector is facing. Different themes were identified and evaluated in comparison to existing norms and theory to reveal a continual change in the landscape of social enterprises. There still is a need for intervention as the sector seems to be growing in figures but not maturing, in itself a potential threat to the survival of the sector in the long run. Some recommendations are factored in that might be helpful in strengthening the operation of social enterprises in the country. If, however, the research suggests that social entrepreneurship can be a more natural act by a much larger number of individuals and entities. Then the field can move forward to create the conditions under which social entrepreneurship can flourish and work its will on solving the great intractable problems of our times. Social entrepreneurs might therefore be welcomed as the pioneers of a new solution that imply citizen participation, new forms of public private partnerships and a means for foundations and support organizations' to specifically address key problems in society and then applied to social entrepreneurship.

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A Study of Self Concept Among the Acoustically Handicapped and Non-handicapped Adolescents

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Abstract: *The self concept of undoubtly a major psychological force in one's life and has intimate relationships with the tone of the individual's interpersonal behavior, academic achievement, occupational choice etc. An attempt was made in the present study to investigate the self concept among acoustically handicapped and non-handicapped adolescents. The sample consisted of fifty acoustically handicapped and non handicapped adolescents The findings indicated that the acoustically handicapped differ significantly on self concept and five areas of self concept e.g. abilities, self confidence, self acceptance, sociability and emotional concept. The findings suggest that the differences found between handicapped and non-handicapped may be attributed to the sensory disability of the handicapped.*

Introduction

Acoustically handicapped is not only a sensory disability, it. is also influences the interpersonal relations (Wiener, 1956, Jordan 1964). To the extent an handicap imposes restrictions on interaction with the environment it may influence on one's behavior. Stripped off from the main stream of communication. The acoustically handicapped may face problems in adjusting to his milieu due to the great gap in his life and experiences set by the handicap (Backer, 1959). Richardson et al (1964) found differences in self descriptions between children with and without handicaps.

The results of most investigations on the personality characteristics of the deaf using paper-pencil tests, questionnaires and inventories reveal that according to the test norms and interpretations derived from normally hearing children. Handicapped children are less well adjusted showing characteristics such as emotional instability and neuroticism (Meyerson, 1955). Hefferman (1955) problems of adjustment found in the handicapped can not be traced directly to the hearing of loss as cause but are deeply rooted in the pattern of their social living. Hefferman further suggests that minor behavioral maladjustments such as temper tantrum and low frustrations tolerance when they occur among the deaf need not necessarily be classified as neurotic symptoms. He considers that they can be treated as direct reactions to stress. In the deaf person, vision has to be used simultaneous for fore-ground and background purposes to substitute the warning function normally carried out by ear. This must surely impose a constant degree of nervous strain and keep the individual in constant stress at least in novel situations.

Allport (1961) held that awareness of self is surely one of the central events of early childhood. Later, as adult many of the individual's behavioral features are critically colored by his/her self concept. The self concept is undoubtly a major psychological force in one's life and has intimate relationships with the tone of the individual's interpersonal behavior, academic achievement, occupational choice etc. The present study attempts to make a comparative study of self concept of the acoustically handicapped and non-handicapped adolescents in order to understand their personality dynamics.

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Methods

Sample

The sample for the present study comprised of two groups of college students belonging to the age group of L5 0 17+. The first consisted of fifty acoustically handicapped students drawn from different colleges. This group included both deaf and hard of hearing adolescents. The second group composed of fifty students, who were free from any defects of hearing. The two groups were matched with respect of age, caste, education religion and sex.

Measures Used

An inventory developed by Rastogi (1979) was used to measure self-concept. It is a five point scale having fifty one items in all. The response categories start from "Fully agree" and continue up to "Fully disagree" along a five point scale. Some items are negative and some are positive. The positive items are scored from 5 to 1, while negative items are score from I to 5. The 51 items inventory consisted of 6 items health and sex appropriateness. 8 items abilities, 5 items self confidence. 4 items self acceptance, 7 items worthiness, 5 items present. past and future, 3 items for beliefs and convictions. 5 items for shame and guilt, 4 for sociability and 4 items emotional self concept. The scale is a self-administering scale which can be given individually or in groups. The reliability of the scale by split-half method with Spearman-

Broun corrections was found to be 87.

Procedure

Rastogi's self concept scale was administered on all subjects individually. Subjects were asked to complete the forms in one sitting. To complete the test subjects usually take less than 30 minutes. Some of subjects were hesitant to complete the questionnaire and then investigator explained the purpose of the investigation in detail.

Results and Discussion

The obtained data were computed on employing t-test to whether the two groups differed significantly. The Means, SDs and t-ratios of the self concept scores of a acoustically handicapped and non handicapped adolescents have been given in **Table 1. & Table 2.**

Table 1: Mean, SD and t-ratio of self concept scores of acoustically handicapped and non-handicapped adolescents

Group	N	Mean	SD	t-ratio	P-value
Acoustically Handicapped	50	111.35	10.04	2.05	.05
Non-Handicapped Adolescents	50	116.08	12.74		

Table2: Showing the Means, SDs and t-ratios of the sub areas of self concept scores of acoustically handicapped and non-handicapped adolescents.

Sub areas of self concept	Acoustically mean	Handicapped SD	Non-Mean	Handicapped SD	t-ratio	P-value
Health & Sex	14.4	3.18	15.4	3.27	1.5	NS
Abilities	21.92	8.58	31.6	4.77	6.87	.01
Self confidence	14.32	3.01	18.36	4.81	5.05	.01
Self Acceptance	14.96	3.67	17.99	3.91	3.99	.01
Worthiness	29.01	6.32	30.66	4.21	1.49	NS
Present Past & Future	12.60	2.25	12.24	1.8	.86	NS
Beliefs & Conviction	12.01	1.99	11.99	1.63	.06	NS
Feeling of Shame & Guilty	12.94	1.82	13.01	2.99	.14	NS
Sociability	15.01	3.28	16.86	3.90	2.53	.05
Emotional	16.99	2.99	12.36	2.01	8.90	.01

A comparison of the mean self concept scores of acoustically handicapped (111.35) and non-handicapped adolescents (116.08) shows in Table 1 that the difference of 4.73 between the two means is in a favour of non-handicapped adolescents is statistically significant at .05 level as t-ratio is 2.05. The non handicapped adolescents scored higher on self concept than the acoustically handicapped adolescents. Thus the results appear quite according to the expectations that the handicapped adolescents would have lower self concept than the non-handicapped adolescents. The difference may be attributed to the sensory disability of the handicapped adolescents.

While analyzing difference on 10 sub areas of self concept it was found that the two groups differed significantly on 5 areas of self concept. The mean scores of acoustically handicapped are lower than the non-handicapped with regard to the abilities, self confidence. self acceptance and sociability self concept. The difference between the two means of the two groups is statistically significant at .OJ level of confidence except sociability. The difference found in the case of sociability is significant at .05 level. But at the same time it may be noted that the mean score of acoustically handicapped (16.99) is higher than the mean score of non-handicapped (12.36). re difference is statistically significant- at .01 level with adolescents appeared to be more emotional self concept. The indicates that the acoustically handicapped adolescents appeared to be more emotional. This finding is in line with the findings of Meyerson (1965) and Rotter (1962). There is reason to believe that acoustically handicapped experience a sense of failure in life in general because of their inferiority in the endowment of senses when compared to normal hearing subjects.

The results of the present study are in general agreement with previous studies done on acoustically handicapped children (Springer, 1938 a; Fiedler 1952). However in line with the Heferman's (1965) explanation of temper tantrums found among deaf may be considered as direct reaction to stressful condition of handicapped rather than any personality inadequacy. Hence the present stud findings may be considered to be partly supported by the findings of Rao and Russell (1960).

Thus, we come to the conclusion that the acoustically handicapped and non- handicapped adolescents are significantly different in their self concept. This can quite evidently through light on the difference in personality of the handicapped and non- handicapped children. The results can be made use of while preparing counseling and guidance programmes for the handicapped children.

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Distributed Systems Computing: Upgradation & Reliability

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Abstract: *Distributed computer systems are increasingly being employed for Large-scale information systems such as aircraft control, industrial process control, and banking systems. Improving the reliability of the distributed system with no hardware cost has been the conventional objective. The system can contain several software upgrades with hard real-time deadlines and different periods where each software upgrade is partitioned into a set of processes related by data dependencies. DS computation requires managing schemes for up gradation that leads to more reliable results than previous work. This paper describes techniques for managing up gradation of a heterogeneous distributed system executing different versions of software upgrades through software techniques.*

Index Terms: *Allocation, clustering, distributed systems, reliability, periodic software upgrades*

Introduction

Distributed Systems consist of loosely coupled processors which communicate with one another only by passing messages and which do not have common memory. Over the last several years, they have become popular as a very attractive option for fast computing and information processing in large-scale information systems such as defense, transportation management, and factory networking, must meet the high standards of reliability, maintainability, and service interruption bound requirements. The approach for the upgrade is to devise a heuristics S. Voulgaris (2005), K.Efe (1982), V.M. Lo (1988),N. S. Bowen (1992),l. y. Liu (1990) to solve the problem. These may give suboptimal results, but are much less expensive. A number of heuristic methods like linear clustering S. J. Kim (1988), W.H.Kohler (1975) and hierarchical clustering G.C.Sih (1993), G.C. Sih (2005) perform allocation and scheduling to minimize the schedule length. None of these methods give any consideration to improving the reliability of the system. Software upgrade allocation is done dynamically. However, if each copy of the software upgrade is allowed to complete, then the degradation in throughput can be substantial. If the copies are allowed to be preempted then reliability may not be achievable for software upgrades.

This takes advantage of the fact that a large number of real-life software upgrades are assertible. The overhead incurred by using assertion software upgrades is much less as compared to the case where all software upgrades are duplicated, since the assertions do not have to recompute the data but only check some property of the data. In l. y. Liu (1990) , however, no explicit reliability model is assumed, and minimization of schedule length is used as the objective. Reliability has been considered as the objective function for allocation in N.H. Vaidya (1993) and an explicit measure of the reliability of an allocation has been introduced. In this paper, techniques are introduced for up gradation of software and reliability of DSC.

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The software upgrades uses the concept of clustering based on static levels. In N.H. Vaidya (1993), the software upgrade graphs considered do not have any precedence constraints. We show that for software upgrade graphs with precedence constraints, the method performs better in terms of reliability and is comparable in terms of CPU time.

Literature Review

There is a large amount of literature on Distributed Systems Computing. Chu et al. W. W. Chu (1991) applied probabilistic approach which is not appropriate to handle hard deadlines. Prakash and Parker N.H. Vaidya (1993) formulated distributed system co-synthesis as an integer linear program (ILP). Their ILP formulation cannot handle periodic processes and preemptive scheduling. Many scheduling or allocation algorithms for distributed systems focus only on a single non periodic software upgrade. Chu and Lan W. W. Chu (1987) reviewed some of these works and categorize them as graph-theoretic, integer 0-1 programming, and heuristic approaches.

However, in most distributed computing systems, different software upgrades running in different rates mix together. For instance, Chiodo et al. Chiodo (1993) gave a seatbelt example to demonstrate multiple-rate software upgrades in distributed systems. A great deal of recent work has studied hardware-software partitioning, which targets a one-CPUone-ASIC topology. The Vulcan system of Gupta and De Micheli S. M. Shatz (1992) and the COSYMA system of Ernst et al. R.Ernst(2002) move operations between software and hardware. They schedule and allocate operations inside a process to satisfy timing constraints between operations. Hardware techniques for safety and the tradeoff between reliability and safety have been addressed in the literature (Vaidya, Pradhan 1993), (Mullazani, 1985). Some techniques for reliability and safety analysis have been described in B.W.Johnson (1986).

Reconfigurable Atomic Memory for Basic Object(RAMBO) works in a distributed system where processes can join and fail during the execution of the algorithm. Several works have been done recently with the aim to address the implementation of concurrent data structures on wired message passing dynamic systems (e.g., M.K.Aguilera (2009), R.Baldoni (2009), S.Gilbert (2003), F.Kuhn (2006). To guarantee reliability of data, in spite of network changes, RAMBO replicates data at several network locations and defines configuration to manage small and transient changes. In S.Gilbert (2003), the reconfiguration protocol has been changed by parallelizing new configuration installations and the removal of an arbitrary number of old configurations.

In M.K.Aguilera (2009), Aguilera et al. show that an atomic register can be realized without consensus and, thus, on a fully asynchronous distributed system provided that the number of reconfiguration operations is finite i.e. there exists a finite time after which there are no more joins or failures. Configurations are managed by taking into account all the upgrades (i.e., join and failure of processes) .

Problem Formulation

The objective is to find a safe mapping of the upgrades to the processors of the system such that the overall reliability of the allocation is maximized. The problem formulation is to upgrade DSC that includes scheduling and allocation problems of the upgrades. A process is a single thread of execution having constraints as an characteristics on its computation time. These constraints are a function of the processor type to which *it* is allocated. A software upgrade is a partially ordered set of processes. A problem specification may contain several concurrently running software upgrades.

A upgrade can be mapped in the form of a task graph, the target architecture in the form of a processor graph, the exclusion and preference matrices and the fault tolerance information. Since the allocation problem is known to be NP-complete, the aim is to implement techniques yielding the best results.

Distributed System Computation

The DSC is assumed to compute the software upgrade distributed transparently to a set of heterogeneous processors connected by an arbitrary interconnection network. The processors only have local memory and do not share any global memory. The processor graph is a convenient abstraction of the processors together with the interconnection network. The input to the distributed system is a job composed of intercommunicating software upgrades represented as an acyclic directed graph called the software upgrade graph. In this work, problem of software upgrade allocation in order to introduce safety in the system and at the same time maximize its reliability is addressed.

Distributed System

A distributed system is "a collection of independent computers that appears to its users as a single coherent system" (2002). This definition covers the two important aspects of distributed system which are R.Ernst (1993) hardware aspect - the machines are autonomous; and N.Lynch (2002) software aspect - the users think they are dealing with a single system. Figure 1 shows a simple structure of a distributed system that is constructed of heterogeneous computers and networks. A layer of software called middleware is placed between a higher-level layer which consists of users and applications, and a lower-level layer which consists of operating systems (Tanenbaum & Steen, 2002). Middleware is designed to manage the complexity and heterogeneity in distributed systems.
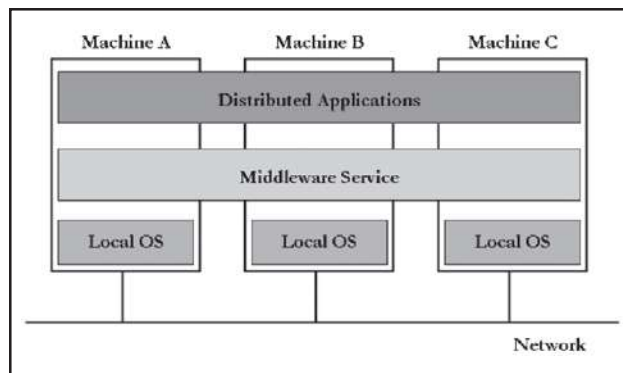
Figure 1: Distributed System Organized as Middleware (Source: Tanenbaum & Steen, 2002)

Task Graph

Task graph is a directed acyclic graph G={T,E} where T={t1; t2; . . . ; tn} represents a set of n tasks and E represents the set of weighted and directed edges among the tasks as in figure 2. The communication from task ti to tj is represented by a directed edge (ti, tj) between the two task. The weight on this edge, cij, represents the volume of data being transmitted from task ti to task tj. P.Y.R.Ma (1982)

Exec_cost(ti)=[ei1; . . . ; eim]

The jth element of this vector, eij, represents the execution time of ti on processor pj. If task ti cannot be executed on processor pj, the corresponding execution time eij is ". A source task in a task graph is defined as task which has only primary inputs as fanins. A sink
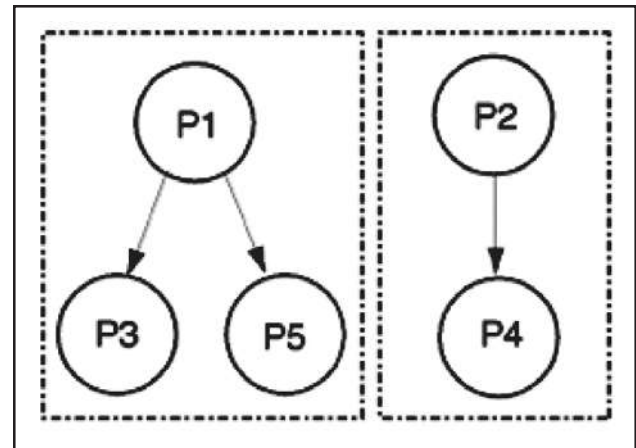

Figure 2: A task graph with processes dependencies

task in task graph is defined as a task which does not have any task graph nodes as fanouts.

Constraints bounded task and Processor

The software to be run on the distributed system is called a job, which is composed of intercommunicating tasks. These tasks are allocated to the different processors in the system.

Allocation techniques can be either static or dynamic.

Task Exclusion

Task exclusion forces two tasks to be allocated on two different processors. Such a constraint may arise when both tasks use some resource very intensively and allocating both to the same processor might overload it. Such constraints can be specified by means of a matrix defined as the **exclusion matrix Ex**. The **exclusion matrix** has tasks as rows and columns. Entry Ex(I, j) is "1" if task ti cannot be on the same processor as task tj. If there are no constraints between two tasks, the corresponding entry is "0". The matrix is symmetric by definition and the diagonal entries are all "0"s.

Task Allocation and Preferences

The allocation matrix X represents the mapping of the n tasks to the m processors. Element of the matrix xij is "1" if task ti has been assigned to processor pj and is "0" otherwise. Task preference P.Y.R.Ma (1982) matrix is used to show multiple resource requirements of a task. In general, a task may not be able to execute on every processor as it
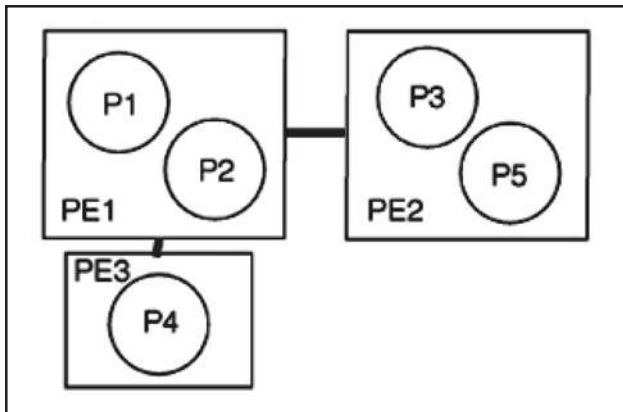
Figure 3: Process allocation in distributed System

may have some specialized requirements (like requiring a special floating point co-processor or I/O device) satisfiable only by certain processors.

Software Upgrade in Distributed System

Processes belonging to the distributed system may decide autonomously to join, leave and rejoin a distributed computation. F.Kuhn (2005), F.Kuhn (2006) Such operation, invoked at some time t, is not instantaneous. However, from time t, the process can receive and process messages sent by any other process that participates in the computation. Some processes also exists in the distributed system that never join the distributed computation.). T.Chandra and S.Toueg (1996) To this aim, it is important to identify the subset of processes that are actively participating in the distributed computation
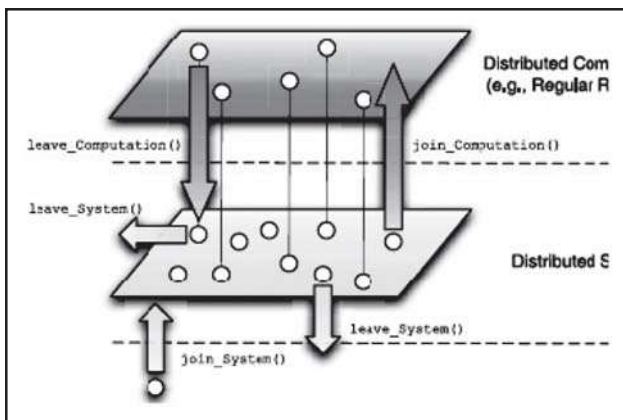

Figure 4: Distributed System and distributed computation

Upgradation & Reliability

The processor and communication link failures are considered time dependent S.J.Kim and J.C.Brown (1988). So an explicit cost function is derived for the reliability of an process allocation. Components of the processor are either operational or failed. Components failing during idle periods, when no jobs are running, are replaced and such failures are not considered critical. The future life of all components is assumed to follow a Poisson process with a constant failure rate. Failures of components are assumed to be statistically independent.

Reliability Analysis

A closed form expression has been derived in [19] for the reliability of a given allocation. This expression can be used to drive an algorithms in searching for an allocation that maximizes the reliability. Consider an n-node task graph and m-node processor graph. The failure rate of processor pi is ëi and the failure rate of the link between pi and pj is µij. Given the allocation matrix X, the reliability cost, relcost.(X), as [19]:

$$relcost(X) = \sum_{j=1}^{m} \sum_{i=1}^{n} \lambda_j x_{ij} e_{ij} \\ + \sum_{k=1}^{m-1} \sum_{b>k} \sum_{i=1}^{n} \sum_{j=1}^{n} 2\mu_{kb} x_{ik} x_{jb} c_{ij} w_{kb}, \quad (1)$$

Formula 1. Reliability cost of allocation matrix

where the reliability is given by e-relcost(X). The "2" in the above equation is due to the fact that each item of data being transmitted along a link incurs a send and a receive cost.

In order to increase the reliability, Reliability cost i.e. relcost must be reduced.

Algorithm for Upgradation and Reliability

Task Grouping

Tasks of the task graph formed into clusters using linear clustering S.J.Kim and J.C. Brown (1988), G.C. Sih and E.A.Lee (1993), for the clusters to be valid, the tasks in each cluster must be fully compatible with all other tasks in the cluster. The purpose of forming clusters is to reduce inter process communication and to make the cluster size appropriate. The clusters should not be too small as this results in an overly fragmented task graph which makes allocation

expensive. Also, excessive fragmentation of the task graph also affects the quality of the results.

Allocation of Groups to Processor

After the clustering stage, the task graph has been partitioned into clusters. The next step is to allocate the clusters to the processors in the system to minimize the relcost i.e. the sum of their execution and communication costs. A cluster is allocated to a processor on the basis of exclusion and preference compatible. If some task is exclusion incompatible in the cluster then it's required to be mapped to a particular processor. If this happens, the cluster is broken up into smaller clusters such that the set of tasks contributing the "1" to the preference vector are all exclusion compatible with that processor.

Next, the remaining clusters have to be allocated. The clusters are sorted in the decreasing order of their total cost, which is the sum of their execution and communication costs, and considered for allocation in that order.

Conclusions

Distributed computers are often the most cost-effective means of meeting the reliability requirements of an distributed computing application. In the past, methods have been presented for software upgrade to maximize reliability. However, such schemes do not give any guarantees about the system behavior when a failure occurs. This is a scenario for potentially undetected faults. In this work, problem of introducing reliability into the system during software upgrades is addressed. Cluster-based heuristics performs better than task-level allocation scheme for upgrades. This method produces reliability driven task-level allocation heuristic and runs an order of magnitude faster. The paper does not address all the modeling issues in distributed systems computations.

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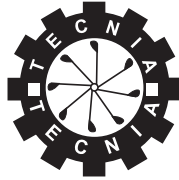
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