

CPJ Global Review

A National Journal of CPJ-CHS & School of Law

An Insight of Management Thinking, Empirical Research Studies
and Management Practices around the Globe



CHANDERPRABHU JAIN COLLEGE OF HIGHER STUDIES & SCHOOL OF LAW

(Approved by Govt. of NCT of Delhi and Affiliated to G.G.S.I.P. University)

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CPJ GLOBAL REVIEW

CPJ GLOBAL REVIEW is an academic Journal that brings together all the academicians and corporate to provide an insight of management thinking, empirical research studies and management practices around the globe. This National Journal is devoted to disseminate findings from research work and exploration of original ideas concerning Business, Management and Technology.

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Editorial

CPJ Global Review a National Journal has completed seven years of its publication and is entering into the eighth year with this issue. During these years, this Journal has strived hard to maintain high academic standards and also strict periodicity of annual production. It is dedicated to the dissemination of ideas and concepts of modern day Management and IT for stimulating academic fervor and knowledge encouraging applied and theme based research. The Journal has created a niche for itself as is evidenced by eagerness of reputed academician and industry professionals across the country to contribute the articles written by them for publication in this Journal.

We believe that learning is a never ending process and one continues to discover oneself in this journey. However, this process is not an isolated and individual venture. It requires an impetus and environment to thrive and flourish in. Keeping this aim in mind, the Journal seeks to facilitate this learning environment. It is a concerted effort to give academic researcher a platform to present their ideas in front of an erudite community.

This Journal is an acclaimed platform and inspires the young academicians and researchers and motivates them for disseminating their research papers, research articles, literature review, case studies and book reviews etc. Volume VIII - Issue I, 2016 of CPJ Global Review covers a regular mix of articles and research papers from Management, Banking, IT, Indian Economy and burning topic of Corporate Governance. All the Papers open up new dimension of research in the identified area such as, Transformation Leadership, An Empirical Investigation on Impact of HRD Climate, On Job Satisfaction, Corporate Acquisition, A Study on Exploring Factors of Drug Counterfeiting in India, Practical Aspects to Indian Financial Reporting Standards, Human Resources Information Systems and Impact on Human Resources Planning, Blended Learning, Enhancing Water Resources through Waste Land Management etc.

We are thankful to all members of Editorial Advisory Committee, in particular to Prof. (Dr.) Ajay Pandit and Prof.(Dr.) Sanjiv Mittal for their continuous support in bringing this issue successfully.

Finally, on behalf of editorial board, I wish to express my sincere gratitude to all contributors/ authors for sharing their valuable findings and ideas with us. Further, we wish to encourage more contribution from academicians and Industry practitioners to ensure a continued success of the Journal. We welcome contributors that can demonstrate near/term usefulness, particularly contributors that take a multidisciplinary/ convergent approach. Authors, reviewers and guest editors are always welcome. We also welcome your feedback, comments and suggestions that could improve the quality of the Journal.

We hope that CPJ Global Review will serve the intended purpose and will be of immense use for researchers.

**Prof. J.P. Mohla
(Director)**

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Transformational Leadership: Strategy for Employee Engagement

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Abstract:

In the light of global environmental, economic and social challenges, to positively design the future of business leaders need to prepare their organization for important transformations. In this context transformational leadership is a leadership model based on vision and empowerment, one suggested to increase both employee effectiveness and well-being which will lead to increased performance and satisfaction of the employees at the same time. The behavior of the leader influences the intention of the employee either to stay or quit the organization. Various researchers have found that employee leave the managers not the organization so it indicates that leadership behavior is having more impact on employee engagement. While employee engagement is still a relatively new area of research, it has been found that engagement significantly predicts the commitment of the employees to the organization. This study aims to discuss and explores the benefits of transformational leadership because still most firms are using traditional transactional leadership which is based on exchange of extrinsic rewards and does not seek to motivate followers beyond the level of avoiding punishment or getting rewards.

Keywords: Transformational leadership, transactional leadership, employee engagement

Introduction

In the modern era, leadership has been identified as one of the crucial issues to ensure the future success of the organization. The ever-increasing complexity of organizations and systems coupled with diversity in the workplace provides a complex context for the practice of leadership. In this background the latest approach of leadership i.e. transformational leadership has emerged as a very effective style to lead the organizations.

In contrast to traditional form of leadership i.e. transactional leadership which is based on certain kind rewards and punishment exchanges between the leader and the followers transformational leadership refers to the leader moving the follower beyond immediate self-interests through idealized influence (charisma), inspiration, intellectual stimulation, or individualized consideration.

Meaning of engagement can be different for both the Organization and the individuals. From the point of view of the management, engagement is the process of inducing people to do the work that is necessary to ensure the continuous high performance and success

of the business. On the other hand from the employees' perspective, engagement is their attitudinal and emotional state towards the work and the organization which they have developed on the basis of affairs and conduct of the management. Positive emotions and attitudes can be created by the leaders by stimulating an intrinsic desire in employees to consistently do their best work. Moreover guidance of visionary leadership is vital to the success of any business because contemporary organizations are in a constant state of flux and often experience large-scale change. Hence acting as a promoter of positive change transformational leaders influence organizational culture so that organizations can adapt the changes mandated by the environment.

In today's world, due to slowdown in major economies like US, China, European Union etc. virtually every firm is struggling with cut-backs and financial pressure so that higher performance with fewer employees can be achieved. Employee engagement in such scenario remains the ultimate prize for employers.

Further rapid technologies changes have forced the organizations to update their products and services to keep

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in line with this demand. Thus it has been a big challenge for managers to lead the business to success in a fierce competition where every firm try to secure as much market share as possible by fulfilling the needs of the consumers. In order to remain competitive, employee engagement is one of the most important determinants of the success of the organization in the face of these pulls and pressures.

In this context the task of transformational leader to align the interest of both the organization on one hand and its members on the other. This kind of leaders facilitate conditions for a well-balanced work environment which is characterized by the correct workload, authority and accountability, recognition, support, justice, belongingness and meaningfulness that promotes engagement.

Moreover the attributes of globalization have placed the companies in such a situation that to increase their performance by increasing efficiency and productivity, the companies need to change their structure continuously. Contrary to the traditional view points of the organizations and its members who used to think of capital simply as shares, cash, investments, or some sort of wealth the leaders who follow this particular approach place maximum focus to employee development and performance management and consider human part of the organization as the most important capital which a firm needs to invest in any business so that they can remain successful and competitive.

Literature Review

Transformational Leadership

In the recent times leadership is one of the most researched topics in the field of organizational behavior. A lot of studies have been conducted on the different styles of leadership and many theories have been proposed. A distinction between transformational and transactional styles of leadership is the focus of current literature. James MacGregor Burns introduced the concept of Transformational Leadership in 1978 in his analysis of political leaders. He proposed two basic concepts of leadership: 'transformational' and 'transactional' leadership (Bass, 1997).

In transactional style, 'transactions' dominate the interaction between the leaders and the followers. The leaders give a special focus to the needs and motives of the followers regarding them as individuals. To take work

from the individuals system of conventional reward and punishment is used by transactional leaders. Result and work orientation are the main focus of these leaders. Three characteristics of transactional leaders are contingent reward, management by exception, and laissez-faire (Bass, 1985).

Contingent rewards refer to a practice where rewards are given to the subordinates if they perform according to certain established standards while no reward is provided if the performance is not conforming to the expectations of the leader. The feature of management by exception defines a situation in which the leader monitors the followers' performance is monitored by the leader and he takes corrective actions if the follower fails to meet standards. Lastly, in the laissez-faire characteristic only emergence of a problem ensures the involvement of the leader. Under transactional style of leadership opportunities for job satisfaction are very limited for the team members.

While transactional leaders follow the principle of exchanging tangible rewards for the work performance and loyalty of the followers, transformational leaders engage with the team members, give attention to the higher order intrinsic needs, and make them to realize about the significance of specific accomplishments and new ways in which those might be achieved (Mugenda & Mugenda, 2003). According to Bass (1985), a transformational leader is someone who increases the commitment of followers to such a level at which organizational interest transcends self-interest of the followers and this modified behavior is beneficial to the organization as a whole. According to Bass (1985) transformational leadership comprises four factors namely,, and idealized influence (charisma), inspirational motivation, intellectual stimulation individualized consideration

Idealized Influence- Sosik, Godshalk, and Yammarino (2004) described that the idealized leaders influences the behavior of their followers by being able to act as role models, persuade their followers to achieve goals, and exhibit interest in developing their proteges careers. These leaders are also seen as "learned and trusted advisors - a source of wisdom," and believed that by acting as mentors, these transformational leaders would reduce the amount of negative stressors experienced by employees.

Inspirational Motivation- The leader motivates the team members by communicating high expectations and

rejecting normal standards. The inspiring leader exhibits his followers that they have the ability to achieve the performance levels which are beyond what they deemed possible. By expressing crucial purposes in a simple way, this leader will develop in his or her followers a higher level of intrinsic motivation (De Vries, 1998). He or she clarifies the future actions, provide a vision of the future and thus uplifts the expectations of his or her followers from themselves.

Individualized Consideration- According to Bass and Avolio (1994), leaders who practice this style of leadership focus on the needs of their followers in terms of the need for achievement, recognition, and growth by acting as a mentor and coach. Attention is paid on individual requirements and development to unlock the potential of the individuals. The leaders tend to enhance the interaction and walk around to spur personalized relationships.

Intellectual Stimulation- Walumbwa, Wang, Lawler, and Shi (2004) noted that transformational leaders influence the behavior of followers so that they examine things critically and find novel solutions to workplace issues, and in doing so, stimulate them to stay involved, motivated, and have positive attitude about their work. Transformational leaders arouse a feeling in their subordinates that transcends the normal and stimulates people to go beyond the possible level. A leader's intellectual stimulation relates his or her followers' awareness about a particular problem and problem solving, focusing thought and releasing imagination.

Thus, the behaviors of transformational leadership described above differ from transactional leadership behaviors in several ways. This style of leadership involve more than the administration of rewards and punishments and involvement of certain kind of transactions between the leader and the follower. Transformational leaders inclined to be more proactive whereas transactional leadership behaviors tend to be reactive. Transformational leaders fundamentally focus on aligning the values, goals and aspirations of followers with those of the organizational strategic goals so that a momentum to achieve these strategic can be created. Transformational leadership is conceptualized as a process of engagement of the leader with the followers, creating a common understanding and raising the level of involvement and satisfaction of both the leader and the follower.

Employee Engagement

Employee Engagement is the scale on which employee commitment, both emotional and cognitive, exists in relation to accomplishing the task, goals, objectives, mission, and vision of the organization. Engagement can be seen as a enhanced level of involvement where each employee wants to do whatever they can for the augmentation of benefit of their internal and external stakeholders, and for the success of the organization as a whole.

Most organizations today realize that a satisfied employee is not necessarily the best employee in terms of loyalty and productivity. It is only an engaged employee who goes the extra mile beyond the basic job and intellectually and emotionally bound to the organization. An engaged employee gives his company his 100 percent because he feels passionate about its goals and is committed towards its values. When employees are effectively and positively engaged with their organization, they form an emotional connection with the company and hence this connection proves to be an effective retention strategy.

Employee engagement is a relatively recent concept. Kahn (1990) proposed that while doing their work, people make use of varying degrees of their, physical, cognitive and emotional capabilities. The main point of contention was to determine the phases when people dedicate themselves to work and when they withdraw themselves from specific task behaviors in the workplace. This movement between being applied and then removed from work has resulted in research on how people perceive themselves, their work and the actual relationship between the two. Khan studied psychological state of personal engagement and disengagement at work and found that three psychological conditions associated with engagement or disengagement at work were; meaningfulness, safety and availability.

According to him people have varying extent of personal engagement in accordance with their perceptions of the benefits, or the meaningfulness, i.e., the positive sense of return on investment of self in role performance. The psychological condition of safety was defined as the guarantees they perceive in different situations in other words, the ability to show oneself without fear of negative consequences to self -image, status or career. Availability was defined as the sense of possessing the necessary physical, psychological and emotional resources while the

people are indulged in their work.

Employee engagement, earlier analyzed by researchers as a condition of positive psychology, was regarded by Maslach and Leiter (1997) to be the opposite of burnout, a negative psychological state. Considering engagement as an antithesis of burnout, which was described by Maslach and Leiter, as a component of three dimensions, namely, emotional exhaustion, inefficacy (reduced personal accomplishment), and depersonalization using the multidimensional Maslach Burnout Inventory (MBI) scale. Although, Maslach and Leiter's conceptualization of job engagement was somewhat similar to Kahn's (1990) theory which is based on the terms of personal engagement and disengagement, the authors were able to add to the existing body of engagement research. Maslach and Leiter specified that employee engagement as the state of energy, efficacy and involvement, and argued that when burnout occurs, the state of energy associated with the work would turn into exhaustion, the state of involvement would revert to cynicism, and the state of efficacy would turn into inefficacy or ineffectiveness.

Furthermore, they indicated that the measurement of employee job engagement and burnout as being two opposites of the same continuum, where high scores obtained on the MBI scale would mean high burnout, but low job engagement, and low scores on the MBI scale would mean low burnout, but high job engagement. They explained that emotional exhaustion i.e., a state of emotional depletion or physical fatigue would result when individuals gave too much of themselves to their work/clients; depersonalization would occur when workers provided services without compassion/empathy for their clients regarding them as impersonal objects rather than as people and negative self-perception, feeling of self-incompetency to do a particular job, inability to cope with the job demand and doubt about the achievement of goals would result in inefficacy.

Taking the work done on engagement further, Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002) defined work engagement as a 'positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption. Vigor is characterized by high levels of energy accompanied by persistent mental resilience and the willingness to invest effort in one's work even in the face of difficulties. Dedication is defined by a sense of significance, enthusiasm, meaningfulness inspiration,

pride, and challenge that the people associate with the work. Finally, absorption is characterized by being fully concentrated and deeply engrossed in one's work, whereby time passes quickly and being detached from the job has some difficulties for those who are doing a particular task.

Other significant conceptualizations of engagement to follow were the work by Harter, Schmidt and Hayes. They defined engagement as the employees' involvement and satisfaction with their work, as well as their enthusiasm for their work (Harter, Schmidt, & Hayes, 2002). Their work was the first to establish a relationship between the idea of engagement with improved business unit performance and profits, making the ground-breaking link that took the term engagement to the commercial frontier. The notion of engagement underscored the fact that engagement should be looked at from an individual perspective, one micro-component at a time.

Individual's feeling of satisfaction and enthusiasm in work-related activities for the organization represents the idea of employee engagement. The interrelationship between high employee engagement and improvements in productivity, profitability, and job satisfaction has been proved statistically. Job involvement and trust are the primary foundations of organizational effectiveness.

Customer satisfaction relates to retention, productivity, profitability and customer loyalty; and engagement is positively related to customer satisfaction as proved in the study by Markos and Sridevi (2010). Engaged employees persistently demonstrate three general behaviors which improve organizational performance which are say, stay and strive. 'Say' focuses on how the employee advocates for the organization to co-workers, and refers potential employees and customers. 'Stay' talks about how an employee avoid the opportunities of getting work in other organization and prefers to be a member of the organization while 'strive' throws light on extra time, effort and initiative of the employee which he exerts to contribute to the success of the company (Baumruk & Gorman, 2006). Problems arise in employee engagement when there is dysfunctional leadership and dissatisfaction with the workplace.

Transformational Leadership and Employee Engagement

Leaders impact organizational effectiveness through their

followers by having a great impact on engaging employees within the organization. Transformational leadership emerges as a style that fosters the development of employee engagement. Kahn's proposition which distinguishes between the three psychological conditions that contribute to engagement, namely psychological meaningfulness, psychological availability and psychological safety, the latter is specifically concerned with the ability to show oneself without fear of negative consequence to self-image, status or career (Shuck & Wollard, 2010). In Bass and Avolio's model of transformational leadership, the leader instils faith and trusts in his followers, gains a sense of trust and respect and provides a vision, mission and high standards of emulation. Employee engagement is concerned with satisfaction, involvement, commitment and empowerment (Shuck & Wollard, 2010). Transformational leadership is concerned with leadership through direct individual involvement, which augments commitment, among other things, and empowerment through teamwork, development and trust.

Over the past twenty years, the concept of transformational leadership has been studied extensively by leadership researchers and the results of their researchers have found that this modern approach is positively associated with a number of important organizational outcomes in many different types of organizations and situations, across different levels of analyses and across cultures (Walumbwa, Orwa, Wang & Lawler, 2005). The relationship between the core behaviors of transformational leadership and the concept of employee engagement is analyzed below:

Idealized influence and employee engagement- The idealized influence or charismatic influence, which a leader may have on their followers is one of the most important feature of transformational leadership (Bass, 1985). Bass described charismatic leaders as being able to "arouse emotions, energize, enliven, or even aggrandize" followers through stimulating team spirit, reframing stressful events into developmental opportunities, and inspiring others to perceive difficult situations as meaningful challenges necessary for developing one's professional and personal skills. The behavior of these leaders which persuades the subordinates to work for the benefit of the group rather than the individual interest helps them to earn the respect and right to lead.

The leader demonstrates high ethical norms and becomes a role model for the subordinates. Sosik et al. (2004) further

postulated that transformational leaders and mentors were alike, because the leaders encourage their subordinates to learn and develop by inculcating self-belief and trust in followers, thereby allowing their followers to develop confidence, self-identity and well-being.

The theory that charismatic leadership positively influences followers' performance has also found support when generalized beyond the workplace, to the school environment. Leithwood, Menzies, Jantzi, and Leithwood (1996) postulated that the likelihood of job burnout among stakeholders (leaders, management and staff) in schools would be expected to get reduced and extra effort would be put in by subordinates when school leaders ideally influenced the followers. The leaders by outlining the mission, values and vision of the school to stakeholders, attempt to make feel them accountable for the improvement of the school's environment in a collaborative setting where stakeholders were able to participate in decision making to influence outcomes so that constant betterment of the things for students can be ensured. Leithwood et al. believed that reduced job burnout (or, greater job engagement) would result when leaders ideally influence by sharing vision with the subordinates, which involve delineating group goals for greater team cohesion, thus increasing the level of collective dedication to the overall mission of the organization by building confidence and trust.

Inspirational motivation and employee engagement- This aspect of transformational leadership has to with the influence that transformational leaders attempts to have on their followers by inspiring and motivating them to remain energized, absorbed and dedicated towards achieving inspirational goals that have been established for the organization in general and for the employees in particular. To motivate employees for aspiring toward and achieving goals, the very first step the transformational leaders take is to set clear inspirational objectives for the subordinates.

The process of goal setting is a constructive process that bestows individuals with meaning and purpose, and also fosters their long-term growth. Furthermore, inspiring leaders convince their followers that they have the ability to achieve their goals and thus the followers are not likely to face the ill- situations of distress, disengagement and may be an experience of a lack of commitment toward achieving their objectives, as a result. The employees who are in a state of disengagement in meeting goals are

similar to a reduction in effort/energy of the followers toward their work. Similarly, Leiter (1992) believed that when workplaces did not support the professional goals of employees, exhaustion, cynicism and reduced professional efficacy would result.

A key component of transformational leadership is vision; the concept of vision is one of the strongest incentives for change and improvement. Vision is simply creating and building commitment for an interesting goal of the future for the unit, department, or organization that is realistic, credible and better than the present. Crabtree (2003) noted that corporate leaders were also more likely to help employees understand the value of their contributions toward the collective vision of the organization when they were able to outline a vision for the future of the organization, they. The employees are not only more likely to feel more certain about the road ahead but they are supposed to be more engaged in their job because they recognize their contribution in the broader mission of the organization. Similarly, Podsakoff, MacKenzie, Moorman, and Fetter (1990) found that managers/leaders displayed basic characteristics of transformational leaders when they motivated subordinates to associate with the overall vision of the organization which also motivated them to stay engaged in accepting set goals as their own.

Individualized consideration and employee engagement- Consideration for others has been found to be an essential element of leadership; transformational leaders have been known to provide individualized support to employees by respecting their needs and feelings. This characteristic, (Bass, 1997), is attributed to leaders who recognize the individual differences between subordinates and prepare a development plan in collaboration with the follower for each individual by rewarding and mentoring their subordinates accordingly.

Bass believed that leaders who brought an individualistic orientation to followers also communicated expectations clearly by inviting them to senior level meetings and briefings, when they are able to clarify expectations with their direct reports, and thereby reduce job ambiguity. By setting clear expectations of performance, followers are likely to experience reduced feelings of disengagement or burnout at work (Harter, Keyes, and Schmidt, 2003).

Establishing trust between leaders and followers is another characteristic of highly transformational leaders, the

leaders do not criticize their subordinates in public and cultivate work environments where employees feel safe without any threaten to their security and a fear of refusal of acceptance of their suggestions and are encouraged to psychologically invest in the work they do after having proper explanation of the reason for their actions (May, Gilson, & Harter, 2004). When subordinates trust their managers or leaders, they were also likely to loyal towards them and the relationship will develop and new heights will be reached in the leadership interaction. Further, high levels of employee engagement would result when leaders solicited and listen to inputs from subordinates, and value the contribution of the employees; they are also more likely to build further trust with their followers.

Another typical characteristic of individualized considerate transformational leaders is demonstration of individualized recognition. This is possible if the leader give rotating assignments to the subordinates in order to develop capabilities and transform potential and after completion appreciate for a job that is done well by the subordinate. O'Driscoll and Randall (1999) advocated that both intrinsic and extrinsic rewards which are a part of recognition can have a significant impact on followers, especially on their level of job involvement. In this regard the leader has to be very careful while delegating work to the followers because realization of untapped potential and effective completion of the assignment is only possible when the delegation is properly planned and applied according to the knowledge, skills and abilities of the employees.

Consideration can be given either to a group or to an individual but this does not mean that the superior adopt a tolerant behavior towards the subordinates. The forms that it may assume include, acknowledging the performance of the employees while constructively pointing out areas for improvement or even criticizing the subordinates. Thus, when leaders show individualized consideration to employees, this encourage them to psychologically identify with their work, and create on the job learning, development and work engagement among followers and hence improved organizational performance can be assured through realization of untapped potential of the employees.

Intellectual Stimulation and employee engagement- According to Harter, Schmidt, and Keyes (2003), when employees are provided with opportunities to grow and

progress intellectually, it results in work engagement. Transformational leaders evoke positive emotions in their subordinates which encourage them to learn new things and stimulate them to work beyond what they deem achievable.

Risk-taking behaviors and autonomy are trademarks for the transformational leaders because they value egalitarianism, and open-mindedness. The dimension of openness ensures that they see new ways of thinking as something that contributes to leadership effectiveness and see the leader's role as instigating and stimulating new ideas. While with the attribute of egalitarianism the leader believe that anyone can do the same thing better and envisions and stimulates new directions.

The intellectually stimulating leader leads by challenging beliefs, values the assumptions underlying the problem or situation, approaching old situations in new ways. The status quo is questioned, partial solutions are not accepted and new innovative methods for developing the organization and accomplishing its mission are explored. This leader will continually seek new ways, to change for the better and to take maximum advantages of opportunities.

The leaders possess the passion to teach, develop, and empower their followers in an effort to enable them to become risk takers and change agents. This leader will attempt to stimulate thought processes to develop new ideas and to encourage alternative means of solving problems and being innovative at all levels of the organization (Bass, 1985). Furthermore, in allowing followers to seek intellectual ways to solve problems, transformational leaders were actually developing their followers to seek innovative and creative ways to solve traditional problems.

Walumbwa, Wang, Lawler, and Shi (2004) noted that if the leaders want to encourage creativity, the best ways are, reframing situations by the leaders, persuading the followers to examine things critically and finding novel solutions to workplace and limiting the criticism if there is any mistake in those new ways of doing things. The intellectually stimulating leader allows followers to analyze situations, critically question long held beliefs/assumptions/values and in doing so, encourages them to stay involved, motivated, and more positive about their work.

Transformational leaders delegate responsibility and authority to followers so that they empower followers to accomplish organizational goals in a relatively autonomous manner. Avolio and Bass (2004) described that intellectually empowered workers would be found themselves self-reliant in decision making, in the absence of the leader. The leader provides significant autonomy/decision making power to the subordinates and ensures greater engagement of them.

Moreover, Avolio and Bass (2004) noted whenever the leader is confronted with ill-structured problem as opposed to well-structured problems he discern, comprehend, conceptualize, and articulate to their associates the opportunities and threats facing their organization and its strengths, weaknesses, and comparative advantages so that the problem could be solved.

According to the literature review, there is a positive relationship between the behavior of the leader and the followers' engagement. The key behaviors of the managers including idealized influence, inspirational motivation, individualized consideration and intellectual stimulation affect the level of engagement of the team members. The leaders persuades the followers to learn and develop, arouse a spirit in them to work as a team and reduce possibilities of embarrassing events that cause stress by being able to act as mentor and role model for them and thus ideally influence the behavior of the followers. The leaders convey subordinates clarity about individual and group objectives and an idea about the vision and mission of the organizations which provide them a sense of purpose and meaning. The superiors also establish a link between individual and the organizational goals so as to create a greater compatibility between both set of goals. Moreover, the manager treat each subordinate as separate individual and accordingly designs the goal and incentives for the followers by identifying each follower's desires, needs and potentials and thus facilitates an environment of trust and safety in the organization. Finally, to challenge status quo bring innovation and creativity in the organization the managers stimulates the employees by questioning old values, beliefs, assumptions and traditional ways of doing things so as to ensure continuous work involvement of the employees. Adopting these behaviors the leaders create an environment of enhanced employee engagement which manifest in the form of less vigour, more dedication and absorption for the employees. Leaders with a focus on right dimension of the organization i.e., employees

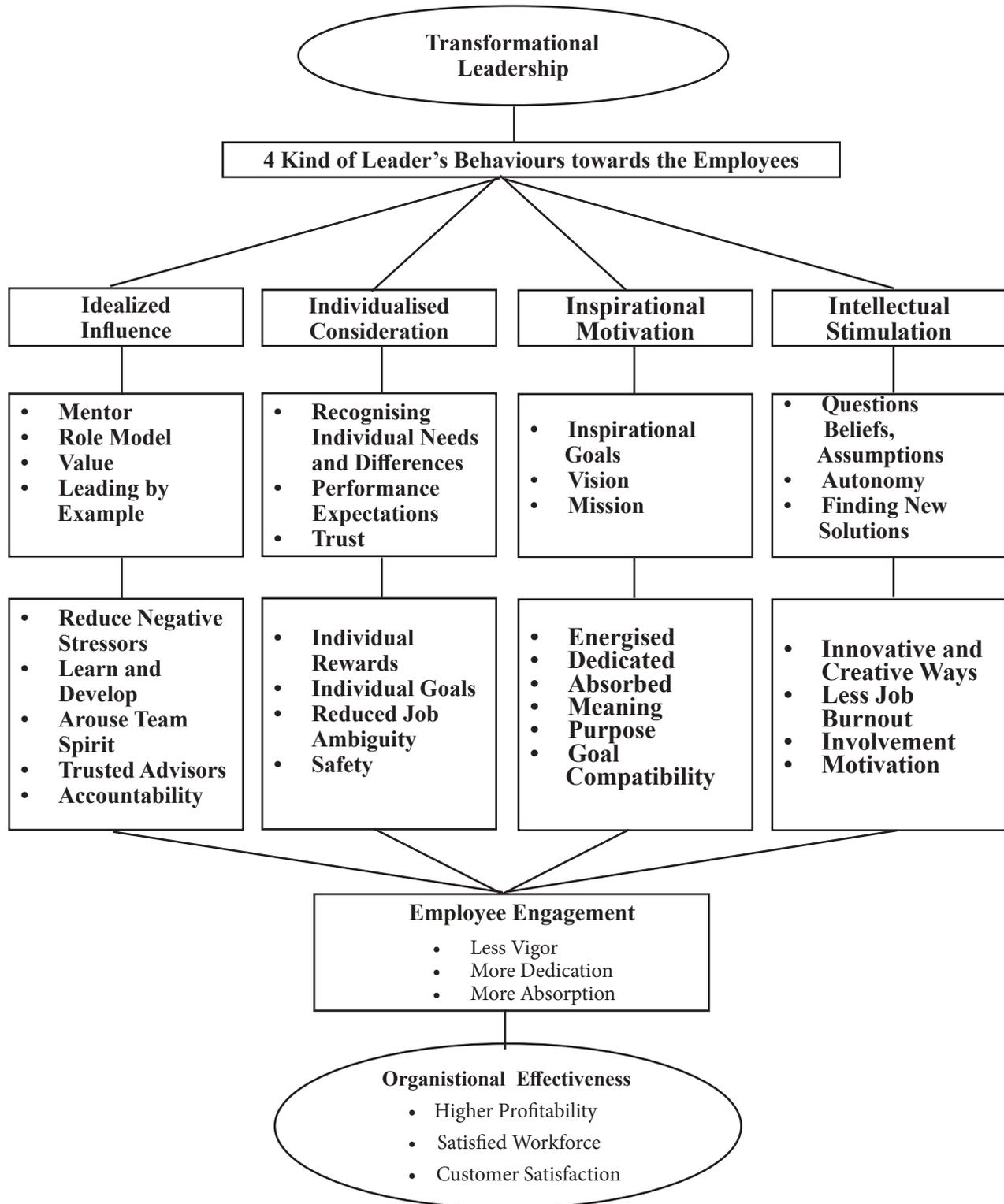
seeks to many positive outcomes like satisfied workforce and customers, good image, and higher profitability and ends up with a right balance between the interest of all stakeholders and thus achieve the ultimate aim of any organization i.e., effectiveness. This model provides a theoretical basis in investigating positive association between transformational leadership and employee engagement.

Thus a proper leader is required in this era of liberalization, globalization and privatization where only most competitive firms with engaged employees can sustain and remain on the path of growth, development and prosperity. In this context Leiter and Harvie (1997) believed that superiors played a defining role in whether employees would stay engaged at work, or would suffer from its antithesis i.e., job burnout. Furthermore, the level of engagement of the supervisors with their job was the determinant of the stage for how employees would engage in the workplace. Leiter and Harvie found that when leaders in the organization were cynical (not dedicated), exhausted (lack of vigor) and expressed a lack of meaningfulness (lower absorption) at work, these feelings were in turn reflected by their followers who also reported similar negative perceptions about their work. Relationship between the negative feelings expressed by supervisors toward their work, and the reflection of those feelings on their subordinates was found between cynicism and meaningfulness. This suggested that when supervisors felt cynical toward their work, or failed to see meaning in their work, these feelings of depersonalization and lack of dedication were also mirrored in the behavior of their subordinates.

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An Empirical Investigation on impact of HRD climate on Job Satisfaction in Durgapur Steel Plant

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Abstract:

A major challenge for any organization in this era of international competition seems to be survival and sustainability amidst cut-throat competition. It is increasingly argued that the organizations, best able to meet the challenges will be those that can acquire and utilize valuable, scarce and inimitable resources (Barney,1995). Human resources can fall into this category, particularly, if they are effectively deployed through appropriate human resource practices and management of organizational culture (Barney and Wright,1998). In order to be developed, the individual should perceive that there is a climate favorable for their development. This responsibility lies with the HRD department which has to provide a proper climate in the organization conducive for employee development in ensuring the competency, motivation and development of its employees. When a critical mass internalized these values, there emerges a conducive climate for HRD. This positive HRD climate renders the existing systems more effective and makes the organizations more receptive to the introduction of relevant additional system (Athreya 1988). A healthy HRD climate certainly bolsters the overall internal environment of the organization, fosters employee commitment, involvement and satisfaction with the job. The present study is an attempt to understand the importance of HRD Climate and as such has been conducted in an organization Durgapur Steel Plant which has scripted a success story in the last few decades imbibing the tenets of HRD policies religiously.

Key Words: Human Resource Development, HRD Climate, OCTAPAC, HRD Mechanisms

Introduction

A major challenge for any organization in this era of international competition seems to be survival and sustainability amidst cut-throat competition. It is increasingly argued that the organizations, best able to meet the challenges will be those that can acquire and utilize valuable, scarce and inimitable resources (Barney,1995). Human resources can fall into this category, particularly, if they are effectively deployed through appropriate human resource practices and management of organizational culture (Barney and Wright,1998). While this has always been true, recent changes focus attention on ways human resources development activities can be used to ensure organization have what it takes to successfully meet the challenges. In order to be developed, the individual should perceive that there is a climate favorable for their development. This responsibility lies with the HRD department which has to provide a proper climate in the organization conducive for employee development in

ensuring the competency, motivation and development of its employees. When a critical mass internalized these values, there emerges a conducive climate for HRD.

This positive HRD climate renders the existing systems more effective and makes the organizations more receptive to the introduction of relevant additional system (Athreya 1988). A healthy HRD climate certainly bolsters the overall internal environment of the organization, fosters employee commitment, involvement and satisfaction with the job. HRD Climate affects performance in three ways: by defining the stimuli that confronts the individual, placing constraints on the individual's freedom of choice and providing source of reward and punishment.

The present study is an attempt to understand the importance of HRD Climate and as such has been conducted in an organization Durgapur Steel Plant which has scripted a success story in the last few decades imbibing the tenets of HRD policies religiously.

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Literature Review

A number of research studies have been conducted to determine the level of HRD climate in an organization and the factors affecting it. Some of the reviewers are mentioned below:

Centre for HRD, Xavier Labour Relations Institute (XLRI) developed a 38-item HRD climate questionnaire to survey the extent to which development climate exists in organisations. Using this instrument the first survey of HRD climate in Indian organisations was carried out by Rao and Abraham (1986). They found that the general HRD climate in the organizations appears to be at an average level (54%). The most important factor contributing to this seems to be a general indifference on the part of the employees on their own development. In another study, Abraham (1989) observed that HRD climate is a powerful intervening variable in translating HRD practices into profit. Venkateswaran (1997) found that, to a large extent, a favourable HRD climate was prevalent in a public sector undertaking in India. Srimannarayana (2001) identified below average level of HRD climate in a software organisation in India. However, Agarwala (2002) found that the HRD climate was significantly more developmental in IT industry when compared to the automobile industry. Mishra & Bhardwaj (2002) concluded that the HRD climate in a private sector undertaking in India was good. Rodrigues's (2004) study in the engineering institutes in India found the HRD climate highly satisfactory. Srimannarayana (2007) found that a moderate HRD climate was prevailing in Dubai organisations. Pillai's (2008) study identified that HRD climate existing in banks as moderate. This study further found that a supportive HRD climate in banks stimulated the learning orientation of the employee. Various studies have also looked into the congruence between individual needs, organizational climate, job satisfaction and performance. Studies indicate job satisfaction as a function of the interaction between personality characteristics of the individual and the perception of the environment by the employee (Downey, Hellriegel & Slocum Jr., 1975). Silkhe and Chaudhary(2010) analyzed and examined the relationship and impact of HRD climate on job satisfaction as an organizational performance measure in selected public sector organizations. The findings indicate that HRD climate has a definite impact on job satisfaction which in turn leads to the increased organizational performance .Riyaz Rainayee,(2000) in their study on

“Value institutionalization and HRD climate: A case study of Navaratna Public sector organization” found a positive relationship between value institutionalization and HRD climate, meaning there by a better and more ethical environment of the organization shall lead to a better HRD climate for the organization. Jain, Singhal & Singh,(1997) conducted a study on HRD climate in two PSUs i.e. BHEL and NFL and concluded that the HRD climate is mainly a function of the effectiveness variables including individual efficiency, organizational efficiency and productivity and HRD variables including management policy on HRD, Organizational development , role analysis and training. Krishna & Rao,(1997) carried out an empirical study on organizational and HRD climate in BHEL and found that HRD climate in the organization encouraged middle and senior managers to experiment with new methods and try out creative methods. Eisenberger, Fasolo and Davis-La Mastro,(1990) found that the increased performance and positive work attitudes came from those employees who perceived that the HR Department is concerned about them. From a practical point of view, this suggests that job satisfaction can be an important barometer of HRM effectiveness. Rohmetra (1998),Kumar and Patnaik (2002), Locke (1976) conducted similar studies and found the impact of HRD climate. The study by Kumar Sruvan and Ravichander (1998) revealed that all the organizational climate dimensions were positively correlated with job satisfaction. The study conducted by Jain, Singhal and Singh(1997), Rohmetra (1998), Alphonsa (2000), Kumar and Patnaik (2002), and Mishra and Bhardwaj (2002) etc. show encouraging results that there exists a significant and positive relationship between HRD climate, organizational effectiveness and productivity.

Organization Profile: Durgapur Steel Plant (DSP), a subsidiary of Steel Authority of India Limited (SAIL), is the nerve centre of the Asansol-Durgapur industrial belt. It is the largest industrial unit in Durgapur-Asansol Belt of West Bengal, third integrated plant of the then Hindustan Steel Limited to come under Public sector in India. It has played a historical part in the industrial development of India. Initiated during the 1950s, Durgapur Steel Plant changed the face of India, bringing with it a lot of technical and industrial growth for the country as a whole. Durgapur Steel Plant was built with the help from Consortium of British Firm, ISCON. The plant started in 1960 with an initial capacity of 1.0 MT/ annum (MTPA). The capacity was extended to 1.6 MTPA in late sixties with an additional investment of Rs. 67.83 crores. Later in the early eighties,

British Steel Corporation, MECON and the Japanese Iron and Steel Federation were entrusted with the job of making a developmental plan for Durgapur Steel Plant. Based on their findings, SAIL decided to modernize DSP with a final Government approved definite cost of Rs. 2668 crores in 1989 which later escalated to more than 4500 crores. Witnessing the massive modernization programmes, DSP scripted a success story for all the organizations to emulate. The present capacity of the DSP is 1.802 MTPA covered under ISO 9001: 2000 quality management system, Durgapur Steel Plant today is extremely well equipped and is stuffed with all the state-of-the-art technology required for quality steel making. The Durgapur Steel Plant has also played a major role in encouraging small-scale industries. A total of 196 small-scale industries are registered with the plant, out of which 29 have been accorded ancillary status. Besides modernization, technological up gradation and rationalized man force, one thing that has greatly scripted the success story of the plant is the religious implementation of Human Resource Development Practices in its premises. Instead of mere rechristening of its personnel department, the plant established a separate Centre for Human Resource Development Department for the implementation of specific and well carved out HRD policies. The result had been a congenial climate, decreased labor turnover, increased productivity and a success story to emulate.

Research Objectives

1. To identify the various dimensions of HRD Climate - the reflection of HRD policies.
2. To measure the various dimensions of HRD Climate identified through objective stated above.
3. To find the relation between HRD climate and Job Satisfaction.

Research Hypotheses

There is no significant relationship between various dimensions of HRD Climate and Organizational Climate. More specifically:

- (a) There is no significant relationship between general climate of HRD Climate and Job Satisfaction.
- (b) There is no significant relationship between

OCTAPAC of HRD Climate and Job Satisfaction.

- (c) There is no significant relationship between HRD mechanism of HRD Climate and Job Satisfaction.

Research Methodology

Questionnaire

HRD Climate survey developed by authors T V Rao and E Abraham has been used to study the HRD climate and for Organizational Diagnosis. The questionnaire used a five-point scale. In order to make interpretations easy the mean scores were converted into percentage scores using the formula :percentage score = (Mean Score--1) X 25. This assumes that a score of 1 represents 0 per cent, 2 represents 25 per cent, 3 represents 50 per cent, 4 represents 75 per cent and 5 represents 100 per cent. Thus, percentage scores indicate the degree to which the particular dimension exists in that company out of the ideal 100 (Rao& Abraham 1986).

To measure Job Satisfaction , 19 items questionnaire developed by Daftudar was used.

Sampling unit, size, technique: Convenience Sampling technique, a form of nonprobability sampling is used for primary data collection. A list of executives was taken from taken from the CHRD office. The questionnaires were given to 200 executives from across the departments and hierarchy. 161 responded positively.

Reliability and Internal Consistency:

To establish the reliability of this HRD climate questionnaire, the internal consistency (that is, homogeneity of items) is tested using Cronbach Alpha. An alpha value of at least 0.70 indicates high consistency or internal agreement between an item and the entire set of all the items in the questionnaire (Guy et. al 1987). Since each alpha is large (greater than 0.70) it can be concluded that the internal consistency of the questionnaires is acceptable and that all the items proposed to be included in the questionnaire are necessary and dropping any one of them does not improve the internal consistency of the questionnaire.

Analysis and Interpretation:

Based on the extensive literature review, the 38 items

included in the HRD Climate questionnaire were grouped into three categories: general climate, OCTAPAC culture and HRD mechanisms. The **general climate** deals with the importance given to human resources development in general by the top management and line managers. It is the supportive climate that is essential for proper implementation of HRD initiatives. In order to assess general HRD climate prevailing in the organization, **14 items (variables 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 18)** are identified from the questionnaire and the responses of the sampled employees in the organization was calculated. The overall mean score for these 14 items put together is 4.1874 on a 5-point scale. Therefore, it can be stated that the general HRD climate prevailing in the units understudy is quite above average. The highest mean score (4.78) was recorded on the item, namely, 'people in this organization are helpful to each other'. (62.96%). This was followed by 'people do not have any fixed mental impression about each other'. Interestingly, none of the items that aimed at assessing the general HRD climate did get a mean score of less than 3.4 (57.08%). But among them, the item relating to 'Employees are very informal and do not hesitate to discuss their personal problems with their supervisors secured the lowest score. 3.6.

The OCTAPAC items deal with the extent to which openness, confrontation, trust, autonomy, pro-activity, authenticity and collaboration are valued and promoted in the organization. **OCTAPAC culture** is essential for facilitating HRD. Variables (**27, 28, 29, 30, 31, 32, 33, 34, 35, 36**) deal with OCTAPAC culture. Openness is present when employees feel free to discuss their ideas, activities, and feelings with each other. By confrontation problems and issues are brought out into the open with a view to solving them rather than hiding them for fear of hurting or getting hurt. Trust is taking people at their face value and believing what they say. Autonomy is giving freedom to let people work independently with responsibility. Proactivity is encouraging employees to take initiative and risk. Authenticity is the tendency on the part of the people to do what they say. Collaboration is to accept interdependencies, to be helpful to each other, and work as teams (Rao & Abraham 1986). The overall OCTAPAC culture in the organizations under study seems to be above average with 60.06% (mean score: 4.3369). Among the dimensions of OCTAPAC culture, collaboration occupied first place with 62.45%. This is followed by authenticity, autonomy, trust, pro-activity, openness and confrontation. When compared among the dimensions of OCTAPAC

culture confrontation secured the lowest score.

The items dealing with **HRD mechanisms (variables 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 37, 38)** measure the extent to which HRD mechanisms are implemented seriously. Successful implementation of HRD involves taking an integral look and making efforts to use as many mechanisms as possible (Rao & Abraham 1986). Training, performance appraisal, feedback and counseling, performance rewards, potential appraisal, career planning, employee welfare, and job rotation are some of the HRD mechanisms. Implementation of these mechanisms was examined in the units understudy. The items in the questionnaire that were administered among the employees aimed at measuring the extent of implementing HRD mechanisms seriously. The analysis of the responses indicates that a high degree of implementation of HRD mechanisms (mean score: 4.29; 59.18%) was prevalent in the organization understudy. But when the employees are sponsored for training, they take it seriously and try to learn from the programmes they attend (64.50%); when employees do good work their supervisors take special care to appreciate them (61.08%); there are mechanisms in the organization to reward good work done (60.94%); seniors guide juniors and prepare them for future responsibilities they are likely to take up (60.88%); and they are sponsored for training programmes on the basis of genuine training needs (60.88%). However, encouragement for taking initiative is a concern (Table 10).

Overall-Picture

On the whole, putting together all the three sectors of business, it is evident that excellent HRD climate was prevailing in the organization understudy (59.61%). The most important factors contributing to this situation seems to be: job rotation that is not much helpful for employee development; indifference on the part of employees to find out their strengths and weaknesses from others and make use of them for their development; dissatisfaction of the employees on the basis of promotion decisions; lack of readiness on the part of the top management to invest considerable part of time and resources for employee development; personnel policies; and lack of enough information to employees on career opportunities in organization. On the positive side, the study found that people in the organization understudy are helpful to each other; juniors see opportunity for development when seniors delegate authority to them; employees learn seriously from training programmes whenever they are

nominated; top management's belief about the importance of human resources and team spirit prevailing among employees

To measure the relation between various variables under study (HRD Climate, General Climate, HRD Mechanism and Job Satisfaction) various tests were conducted and the finding is given below:

A Pearson product-moment correlation was run to determine the relationship between HRD Climate, General Climate, HRD Mechanism and Job Satisfaction in employees at Durgapur Steel Plant. The data showed no violation of normality, linearity or homoscedasticity (Table 2). There was a strong, positive correlation between HRD Climate and General Climate ($r = .934$, $n = 161$, $p < .0005$), HRD Climate and HRD Mechanism ($r = .928$, $n = 161$, $p = .0005$), HRD Climate and OCTAPAC ($r = .889$, $n = 161$, $p = .000$) and HRD Climate and Job Satisfaction ($r = .791$, $n = 161$, $p = .000$). All the relations were statistically significant ($p < .0005$). Further, All the dimensions were also strongly correlated and statistically significant with the dependent variable job satisfaction. (table 3).

The R² value indicates how much of the total variation in the dependent variable, Job Satisfaction, can be explained by the independent variable, HRD Climate. In this case, 63.8% can be explained, which is fairly large. Further, to study the impact of HRD Climate on Job Satisfaction at microscopic level, the data was segregated into two parts: impact of HRD Climate perceived as low on job satisfaction and impact of HRD Climate perceived as high on job satisfaction. The R² value for both categories was found to be 32.6% and 79.4 respectively. Thus, HRD Climate predicted 32.6 % variation in job satisfaction due to positive HRD climate perceived, where as 79.4 variation due to negative HRD Climate perceived (table 6 & 7). Statistical significance of the regression model (table 8) $p = 0.000$, which is less than 0.05, and indicates that, overall, the regression model statistically significantly predicts the outcome variable. The **Coefficients** table implies that Job Satisfaction contributes statistically significantly to the model as $p < 0.5$. Job Satisfaction therefore can be predicted from HRD Climate as:

$$\text{Job Satisfaction} = -9.042 + 1.154 \text{ HRDC}$$

Conclusion

The analysis leads to the conclusion that excellent HRD climate is prevailing in the organization. Category wise, it is observed that that OCTAPAC culture –the essence of HRD Climate was more prevalent than HRD mechanisms and general HRD climate. The organization has a pool of professionals which are working for a larger cause and meeting their professional satisfaction. The organization shows great degree of transparency indecision making and shares information across levels. The management believes in having a participative approach to decision making. There is enough autonomy to perform one's job. Also the organization offers enough scope for personal and professional growth. The leadership of the organization is approachable and is sensitive to the needs of the employees. There is a great emphasis on capacity building and skill enhancement of the employees. Overall, the organizational climate is conducive to develop potential and competencies of the employees and provide opportunities for fulfillment. The positive motivational work culture has ensured optimum utilization of the capabilities of the team members leading to satisfied workforce. The study also found a strong relation between various dimensions of HRD Climate and Job Satisfaction. Moreover, it was observed that while high score on HRD Climate was not very strongly correlated with job satisfaction ($R^2 = .326$, explaining 32.6 % variation in Job satisfaction due to high HRD Climate score) ; , low scores on HRD Climate bear very strong correlation with job satisfaction ($R^2 = .794$, explaining 79.4 % variation in Job satisfaction due to high HRD Climate score). Thus, it could be concluded that though HRD Climate is not the only factor that creates job satisfaction and there are many moderating variables; it certainly is one of the most important factor in creating job dissatisfaction. Thus HRD Climate is both means and ends in itself, both hygiene and motivating factor in it. While the absence creates dissatisfaction, a congenial presence acts as motivator causing satisfied workforce.

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Table 1
Reliability Statistics

Cronbach's Alpha	N of Items
.939	38 (HRD Climate)
.712	19 (Job Satisfaction)

Table 2
Tests of Normality

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
GC	.114	161	.800	.975	161	.805
HRDM	.095	161	.801	.964	161	.800
OCTAPAC	.102	161	.800	.972	161	.802
JS	.115	161	.754	.856	161	.0747

a. Lilliefors Significance Correction

Table 3
Correlations

		HRDC	GC	HRDM	OCTA-PAC	JS
HRDC	Pearson Correlation	1	.934**	.928**	.889**	.791**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	161	161	161	161	161
GC	Sig. (2-tailed)	.934**	1	.785**	.731**	.749**
	N	.000	.000	.000	.000	.000
	Pearson Correlation	161	161	161	161	161
HRDM	Pearson Correlation	.928**	.785**	1	.780**	.699**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	161	161	161	161	161
OCTAPAC	Pearson Correlation	.889**	.731**	.780**	1	.703**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	161	161	161	161	161

JS	Pearson Correlation	.791**	.749**	.699**	.703**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	161	161	161	161	161

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

Table 4
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.799a	.638	.636	6.656	1.794

a. Predictors: (Constant), HRDC

b. Dependent Variable: JS

Table 5
ANOVA^a

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	12418.704	1	12418.704	280.314	.000b
1 Residual	7044.141	159	44.303		
Total	19462.845	160			

a. Dependent Variable: JS

b. Predictors: (Constant), HRDC

Table 6
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-9.042	3.171		-2.851	.005
1 HRDM	1.154	.069	.799	16.743	.000

a. Dependent Variable: JS

Table 7
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.571 ^a	.326	.393	3.016	1.305

a. Predictors: (Constant), High HRDC

b. Dependent Variable: JS

Table 8
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.891 ^a	.794	.793	5.016	1.305

a. Predictors: (Constant), Low HRDC

b. Dependent Variable: JS

Table 9
Item wise score on HRD Climate Questionnaire

VARIABLE	SUM	MEAN	%	S.D.	VARIABLE	SUM	MEAN	%	S.D.
VAR1	499	3.10	52.48	1.03	VAR20	544	3.38	59.47	0.83
VAR2	472	2.93	48.29	1.25	VAR21	519	3.22	55.59	0.91
VAR3	499	3.10	52.48	0.87	VAR22	545	3.39	59.63	0.75
VAR4	469	2.91	47.83	1.03	VAR23	452	2.81	45.19	0.94
VAR5	466	2.89	47.36	1.09	VAR24	588	3.65	66.30	1.08
VAR6	507	3.15	53.73	0.85	VAR25	613	3.81	70.19	0.91
VAR7	492	3.06	51.40	0.96	VAR26	512	3.18	54.50	0.80
VAR8	563	3.50	62.42	0.78	VAR27	471	2.93	48.14	1.09
VAR9	548	3.40	60.09	1.00	VAR28	404	2.51	37.73	0.99
VAR10	491	3.05	51.24	0.84	VAR29	468	2.91	47.67	1.16
VAR11	458	2.84	46.12	1.23	VAR30	418	2.60	39.91	1.01
VAR12	548	3.40	60.09	0.94	VAR31	552	3.43	60.71	1.14
VAR13	582	3.61	65.37	1.13	VAR32	567	3.52	63.04	0.78
VAR14	516	3.20	55.12	1.07	VAR33	591	3.67	66.77	1.06
VAR15	529	3.29	57.14	1.03	VAR34	477	2.96	49.07	1.03
VAR16	449	2.79	44.72	1.25	VAR35	520	3.23	55.75	0.74
VAR17	531	3.30	57.45	0.96	VAR36	563	3.50	62.42	0.99
VAR18	439	2.73	43.17	1.23	VAR37	497	3.09	52.17	1.32
VAR19	544	3.38	59.47	0.99	VAR38	465	2.89	47.20	1.26

Table 10

DIMENSIONS	MEAN
GENERAL CLIMATE	4.18
HRD MECHANISMS	4.29
OCTAPAC	4.33

To Compare the Level of Anxiety and Aggression between Individuals in a Dating Relationship Vs Singles

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Abstract:

Dating is a part of the human mating process whereby two people meet socially for companionship, beyond the level of friendship, or with the aim of each assessing the other's suitability as a partner in an intimate relationship or marriage. "Dating" means different things to different people, particularly across generations. At love is respect, we define "dating" as two people in an intimate relationship. The relationship may be sexual, but it does not have to be. It may be serious or casual, straight or gay, committed or open, short-term or long-term. The important thing to remember is that dating abuse can occur within all kinds of intimate relationships. In this paper an attempt is made to find out and compare the level of anxiety in a dating relationship vs singles

Keywords : Relationships, Anxiety, Aggression

Introduction

A single person is someone who is not in a relationship or is unmarried. In common usage, the term 'single' is often used to refer to someone who is not involved in any type of serious romantic relationship, including long-term dating, engagement, or marriage. Single people may participate in dating and other activities to find a long-term partner or spouse. People may remain single for a variety of reasons, including financial and emotional or physical health issues, stress in the family, time constraints, education, career, personal preferences, advanced age or social fears, and living in a society or locality where there are an insufficient number of people of the preferred sex for romantic or sexual attraction. In some cases, single people may be uninterested in marriage, domestic partnership, or other types of committed relationships.

Relationships are how we relate to others. We have relationships with everyone we know and those who are close to us. Each and every interaction we have with another person is the act of relating. If we have a problem relating to others, it affects our ability to have supportive relationships. We have to ask ourselves if our relationships are supportive, and if they are not, then ask why they are not. Everyone wants the perfect romance or marriage, but not everyone looks at the mechanics of how to have one. If we fail to have supportive relationships in our life, how

can we have the "perfect love" relationships? Through the act of supporting, we honor and validate who the other person is. This in turn, validates who we are. So, both are supported; no one loses; no egos are involved; and, so doing, we honor the relationship. This is what it means to have a supportive relationship. This is the desired goal. Now, how do we accomplish it?

Our conduct patterns, 'positive' or 'negative' get set as we grow up. In order to clear a problem, one must identify the original cause which created a behavioral pattern, move through the experience of that situation and experience the emotions associated with it.

The healing process is a time when we must be loving to the self. If we beat up the self about the experience which had caused us harm or our past reaction to it, then we cannot heal. In being loving to the self, we validate what we had experienced at that time. Our emotions are always valid. So, it is important for us to do this self-validation in order to heal. Love is the energy which helps us heal—whether we give this love to ourselves or receive it from another. Loving relations start with the self. When we look at having supportive relationship in our life, why not start with the self? Because that is where love comes from. This is what transforms our relationships and our lives. We must love the self first. And we cannot do that until we have healed and become whole. Spiritually we must rise, and our spiritual quotient must be high. For, it is not about

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what we can receive from love, but what we can contribute or give to love. The more we give, the more are the returns.

A healthy relationship is one in which both people feel a healthy sense of “self”. Each person feels warm and loved when with each other. Two emotionally healthy people try to be each other’s everything, to meet all their needs, to be what they want them to be, while staying true to who they are. To be in a healthy relationship, is when they find a place where they can ask openly for help without fear of criticism. A healthy relationship means that both people feel respected and loved even when problems arise. To show your partner respect is a huge aspect of a healthy relationship, you must exhibit behaviors the other desires.

To have a healthy relationship you must set boundaries or limits. When you start a relationship, know how far you want to go. Make sure to inform the other of your boundaries. Start fresh, clean, and honest to have a healthy relationship. If a relationship invades your emotional harmony take a step back from the other. Don’t talk or visit as much. It may not be right for you, so clear your mind, and try to straighten your thoughts out. Another component of a healthy relationship is to have healthy conversations. Be honest, kind, and show that you respect the others wants, thoughts and boundaries.

Self focus is the key to having a healthy relationship. Don’t let your life revolve around them. Although, you want to be with them, don’t forget and neglect the other people you have relationships with. Keep your mind set on your hope, dreams, and future plans. This will keep your harmony balanced. Asking for too much from someone could overload the other and slowly push them away.

A relationship is not only the person whom you are dating, going out with, or hooking up with, but the people you interact with everyday. A relationship can be close, and supportive, or stressful and abusive. Family, peers, school mates, partners, doctors, neighbors, these are all examples of people you may have an occupational relationship with. These people may mean the world to you, or be someone who you could deal living without knowing them. No matter whom with, you must practice having a healthy relationship with them all.

The hardest part of being in a relationship is that you don’t have control over the other person chooses to do. Relationships can sometimes lead to stress, depression, loss of self-esteem, loss of confidence, and/or even physical illness. It is important for you to think about

things that can protect you in a relationship. If you have a healthy relationship that is supportive, and loving you are more likely to feel happy and satisfied with life and with your relationship. Keep your eyes open for signs that you could be in an unhealthy relationship.

Anxiety

Anxiety is an emotion characterized by an unpleasant state of inner turmoil, often accompanied by nervous behavior, such as pacing back and forth, somatic complaints, and rumination. It is the subjectively unpleasant feelings of dread over anticipated events, such as the feeling of imminent death Anxiety is not the same as fear, which is a response to a real or perceived immediate threat, whereas anxiety is the expectation of future threat. Anxiety is a feeling of fear, uneasiness, and worry, usually generalized and unfocused as an overreaction to a situation that is only subjectively seen as menacing. It is often accompanied by muscular tension, restlessness, fatigue and problems in concentration. Anxiety can be appropriate, but when experienced regularly the individual may suffer from an anxiety disorder.

Relationships can be one of the most pleasurable things on the planet, but they can also be a breeding ground for anxious thoughts and feelings. Relationship anxiety can arise at pretty much any stage of courtship. For many single people, just the thought of being in a relationship can stir up stress. If and when people do start dating, the early stages can present them with endless worries: “Does he/she really like me?” “Will this work out?” “How serious is this?” Unfortunately, these worries don’t tend to subside in the later stages of a romantic union. In fact, as things get closer between couples, anxiety can get even more intense. Thoughts come flooding in like: “Can this last?” “Do I really like him/her?” “Should we slow down?” “Am I really ready for this kind of commitment?” “Is he/she losing interest?”

All this worrying about our relationships can make us feel pretty alone. It can lead us to create distance between ourselves and our partner. At its worst, our anxiety can even push us to give up on love altogether.

Aggression is the feelings of anger or antipathy resulting in hostile or violent behaviour; readiness to attack or confront. Aggression is overt, often harmful, social interaction with the intention of inflicting damage or other unpleasantness upon another individual. It may occur either in retaliation or without provocation. In humans, frustration due to

blocked goals can cause aggression. Submissiveness may be viewed as the opposite of aggressiveness. Aggression can take a variety of forms, which may be expressed physically, or communicated verbally or non-verbally

Relationship between anxiety and aggression

Psychopathologies such as anxiety- and depression-related disorders are often characterized by impaired social behaviors including excessive aggression and violence. Excessive aggression and violence likely develop as a consequence of generally disturbed emotional regulation, such as abnormally high or low levels of anxiety. This suggests an overlap between brain circuitries and neurochemical systems regulating aggression and anxiety.

Review of Literature

Each research is an outcome, in a way or the other, of previous work done in the area and its own humble way also contribute to future research. Further, the work done by previous researchers help conceptualize and hypothesis phenomena, and through critical appraisal draw out information which may contribute with regard to decisions about in tools and methodology. With these broad objectives in mind, the researcher undertook literature search to obtain information and review the status of work being done in that area.

A new study has looked at the impact our relationships and family life have on our well-being and it tells us once and for all whether we're really happier in a relationship.

The Office for National Statistics asked Brits to rate their satisfaction with their lives from 0 'not at all satisfied', to 10 'completely satisfied'. And there was some correlation between happiness and relationship status. It found that 32 per cent of people who were married rated their life satisfaction as very high (9 to 10 out of 10), compared to 26 per cent who co-habit, 21 per cent of singletons and 18 per cent of divorcees. However, in the high satisfaction category (7-8) there was barely any difference in terms of happiness for people who were single, married, or cohabiting. Over half of those surveyed in each category put themselves in this box. So, married bliss might be the state in which people feel peak happiness, but, as a nation, we're also happy whether we're riding solo or coupled up.

The Denver Family Project, conducted through the 1980s and 1990s aimed to determine whether couples who

remained satisfied, became distressed, or divorced could be identified by their scores on a range of demographic and interaction factors. By collecting both self-report and observational data at multiple points the researchers tried to address the limitations of other studies that used only self-report and demographic information from one partner over short periods. Clements, Stanley and Markman (2004) analysed data from couples participating in the project who had been followed for 13 years. Their analysis showed that the way that partners interact at the very beginning of their marriage, that is, the intensity of problems, negative communication patterns and invalidation of emotions, sets the couple up for a gradual erosion of positivity across the life of the relationship. These factors, which could reliably discriminate between couples who were together and happy, were together but distressed, and were divorced, are amenable to educative interventions and thus appropriate targets for practitioners working with couples in either primary or secondary intervention settings. Lasting couple relationships | 7 Although their studies were based on longitudinal data, the age of the data analysed by Proulx and Snyder-Rivas and Clements et al. may give pause to attempts to apply the findings to current relationships. Given the emphasis now on the social and relational context in which relationships unfold (Fincham & Beach, 2010) one may wonder whether the findings can be generalised from couples forming and maintaining relationships across the 1980s and 1990s. However, as the complexities of modern relationships are further revealed through current methods and techniques, the factors contributing to long-lasting relationships identified in earlier research serve as a touchstone for new understandings.

Methodology

Design of the Study

The present study was conducted on students, the description of the sampling procedure is given below, and as far as design of present investigation is concerned it is correlational as well as comparative in nature.

Sample

Our study uses the survey data collected from approximately 80 young adults ranging from 18-25 years from nearly all departments of Amity University in Haryana. In this sample of N=80 (including both people in a relationship and singles), 40 from a dating relationship and 40 singles.

Research Design

The present research is a comparative research type. Our study uses the survey data collected from approximately 80 young adults ranging from 18-25 years from nearly all departments of Amity University in Haryana. In this sample of N=80 (including both people in a relationship and singles), 40 from a dating relationship and 40 singles.

Procedure

The data collection was done using the anxiety and aggression questionnaires, appropriate samples were found then after the data collection the Pearson's correlation was used to find out the results.

Measures Used

State– Trait Anxiety Inventory For Adults: The State-Trait Anxiety Inventory (STAI) is an introspective psychological inventory consisting of 40 self-report items pertaining to anxiety affect. The STAI was constructed by Charles Spielberger, R.L. Gorsuch, and R.E. Lushene, based on the state-trait distinction proposed by Raymond Cattell in 1961.

Their goal was to compile a set of items that could measure anxiety at both poles of the normal affect curve (state vs. trait). Feelings of unease, worry, tension, and stress can be defined as anxiety. Feelings of anxiety may occur in stressful situations such as when confronted with an important test or interview, or may be associated with psychological disorders such as obsessive compulsive disorder or generalized anxiety disorder. The STAI purports to measure one's conscious awareness at two extremes of anxiety affect, labeled state anxiety (A-state), and trait anxiety (A-trait), respectively. Affectivity ranges from immediate, transitory emotional states, through longer-lasting mood states, through dynamic motivational traits, ranging all the way up to relatively enduring personality traits. Higher STAI scores suggest higher levels of anxiety. The most recent version is the State-Trait Anxiety Inventory for Adults™ (STAI-AD). Although originally based on English language words, the STAI subsequently has been translated and adapted into more than 40 different languages including, for example, Chinese, Danish, Dutch, Finnish, French, Italian, Norwegian, Portuguese, Spanish, Swedish, and Thai. The STAI was revised into its current form in 1983. The STAI can be administered across a range of socio-economic status levels and requires only a sixth grade reading level. It is used (along with other measures)

in making diagnoses and distinguishing between anxiety and depression, in clinical settings, as well as in research.

Spielberger also constructed other self-report state-trait scales purported to measure various other emotions and dispositions such as the State-Trait Anxiety Inventory for Children (STAIC), the State-Trait Curiosity Inventory (STCI), the State-Trait Anger Scale (STAS), the State-Trait Anger Expression Inventory (STAXI), and the State-Trait Personality Inventory (STPI).

Aggression Questionnaire: This self-report inventory makes it possible—and practical—to routinely screen children and adults for aggressive tendencies. The *Aggression Questionnaire* (AQ) measures an individual's aggressive responses and his or her ability to channel those responses in a safe, constructive manner. Because it takes just 10 minutes to complete, the AQ can be administered quickly to large numbers of people.

The AQ is a full revision of the *Buss-Durkee Hostility Inventory*, a longtime standard for assessing anger and aggression. It consists of just 34 items, scored on the following scales:

- Physical Aggression
- Verbal Aggression
- Anger
- Hostility
- Indirect Aggression

A Total Score is also provided, along with an Inconsistent Responding Index. Standardization is based on a sample of 2,138 individuals, ages 9 to 88, and norms are presented in three age sets: 9 to 18, 19 to 39, and 40 to 88. In addition, norms for the Verbal Aggression and Physical Aggression scales are separated by sex.

Written at a third-grade reading level, AQ items describe various characteristics related to aggression. The respondent simply rates each item on a 5-point scale ranging from “Not at all like me” to “Completely like me.” Because it is brief and easy to read, the scale can be used with virtually anyone, including respondents who have difficulty with more complex verbal measures. The test can be hand scored in minutes. Or it can be administered and scored using the AQ CD, which also allows you to print out a detailed interpretive report on the spot.

While the 34-item AQ is recommended for clinical

purposes, a short form is available for use in research and in those instances when a client fails to complete the full questionnaire. To use the short version, simply administer and score the first 15 items on the AQ AutoScore Form. Because these 15 items include three from each AQ scale, the short version gives you not only a total score but also scale scores, which correlate well with their counterparts from the full AQ.

In clinical settings, the AQ's five subscale scores provide a level of detail that is particularly useful for treatment planning and outcome measurement. In correctional settings, the simplicity of the AQ makes it an excellent choice for documenting need for service and focusing rehabilitation efforts. In other institutional settings—schools, businesses, military installations, and geriatric or convalescent hospitals it can be used for both screening and program evaluation. Brief and inexpensive, the AQ makes **large-scale** screening of aggression a realistic option.

Results and Discussion

Correlation was found to be significant at the 0.05 level (2-tailed). This means that the result is significant which clearly indicate that the ones that are high on aggression are high on anxiety as well. The relationship between anxiety and aggression was found to be positive. Subjects that were high on anxiety were found to be high on aggression as well.

And aggression leads to stress, anxiety and a number of other problems as discussed earlier. This comparative study has also shown a high level of anxiety in singles than those who are in a dating relationship.

Results also indicate that singles as compared to people in a dating relationship face more anxiety and aggression.

Now this can be due to a number of reasons, some of which are enumerated below.

People who are single sometimes have no one to share their problems with and face anxiety and aggression issues, they feel lonelier as compared to the ones that are in a dating relationship.

People in a dating relationship have more emotional security as they have someone to constantly motivate

them, support them and make them feel worth.

Spending time with loved ones also makes them feel light and on the other hand singles are more prone and vulnerable as they too seek the support of loved one.

Hence the study has shown that where there is aggression there is anxiety as well and it is more in the case of singles. The study definitely has important implications for the ones in relationships. For a better research outcome it would be interesting to see how subjects in a large sample really respond to this conjecture. Herein lies the scope of the future study in this area.

This also has important implications for teachers and parents too as there are lot many students facing the issues of broken relationships even as early as high school level and which has significant repercussions in case of their academic output.

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Corporate Acquisition – A Financial Strategy with Reference to Sun Pharma and Ranbaxy

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Abstract:

This world is advancing in faster pace due to changes in customer's requirement, technology and fierce competition. To continue the existence in the market place, companies move in the direction routed by changing environment of the new era. It simply means companies have to restructure its activities to focus on their core values in many forms. This is a quantitative research paper in which acquisition between Sun Pharma and Ranbaxy has been studied. The corporate restructuring, as the financial strategy, will make an effect on the overall cost of capital or will have an effort to bring it to the lowest so that the changes with respect to various operational and functional activities of the organization. The present study examines the relationship between acquisition and financial performance of company. For this purpose, various financial parameters have been used like net sales, net profit and EPS. Researchers have taken a Sun Pharma company, as sample to show its financial position before and after its acquisition with Ranbaxy focusing on quarterly profit and loss account of 2013-14 & 2014-15. After getting all the data, an analysis on the relationship between corporate acquisition and other financial parameters like net sales, net profit, and EPS were tested by paired t –test. Irrespective of this general outcome, the current study depicts evidence that there is negative relationship between corporate acquisition and financial performance of Sun Pharma companies.

Keywords: Acquisition, Financial Strategy, Financial Position, Corporate Performance

Introduction

Firms use different strategies for growth and expansion of their business, product and geographic scope. Albeit there are many possible paths for pursuing growth, such as organic or internal development, engaging in strategic partnerships, among other entry modes, it is remarkable the extent to which firms have been using mergers and acquisitions (M&As) strategies for both domestic and international growth. Mergers and acquisitions (M&A) is the part and parcel of corporate finances, management and strategy dealing with purchasing and/or joining with other companies. It is treated as a financial strategy that allows businesses to expand their market share and to become larger players in their business. M & A is not an easy task, it has to be done carefully. To a great extent, it creates fruitful effect on business activity as well shareholders wealth, but every time it cannot be said that it is beneficial for both the companies. Sometimes it brings negative values. Before making an acquisition, it is essential for a

company to evaluate whether its target company a good candidate or not. There are bucket loads of motives behind the corporate acquisition. In current study acquisition between Sun Pharma and Ranbaxy has been focused. To increase presence in global and domestic markets, Sun Pharmaceutical Industries is buying Ranbaxy Laboratories in a share swap deal. Ranbaxy shareholders will get four shares of Sun Pharma for every five shares held by them.

The acquisition has made Sun Pharma number one in the generic dermatology space. It is right now number three in the US in this space. Gross sales of the combined entity are estimated to be Rs 27,000 crore or \$4.2 billion. Ranbaxy has a significant presence in the Indian market (21% sales) and in the US (29% sales), where it offers a broad portfolio of abbreviated new drug applications (ANDAs) and first-to-file opportunities. In high growth emerging markets (50% of Ranbaxy's sales), it provides a platform which complements Sun Pharma's strengths. Below mentioned figure depicts revenue contribution from different markets:

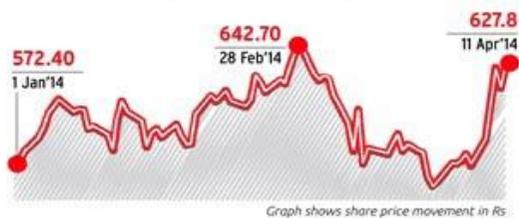
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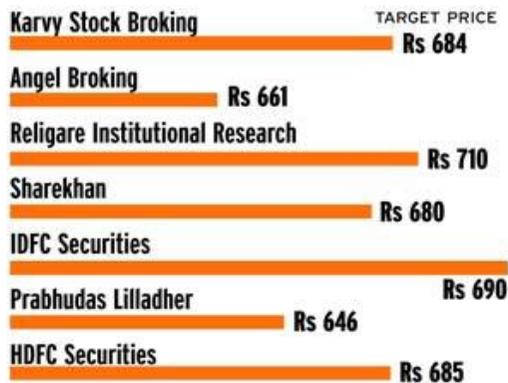
On A High

The Sun shares jumped 7% during April 7-11



Healthy Dose

Market experts are bullish on Sun Pharma



Expanding Pie

Revenue contribution from different markets

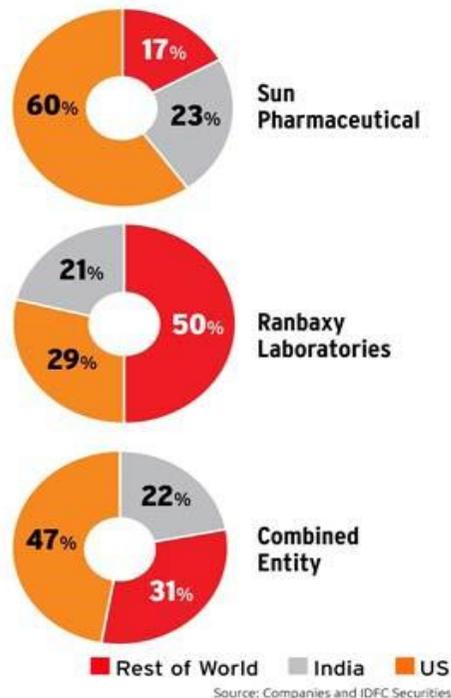


Table 1 Revenue contribution from different markets

Literature Review

It is also worth clarifying that there are different types of M&As, namely as to the scope involved in the deal. Gaughan (1999) classifies M&As as horizontal, vertical and conglomerate. Horizontal M&As are undertaken by firms operating in the same market performing the same activity and producing the same products, such as in the case of an M&A with a direct competitor. Vertical M&As occur between firms that operate in different stages of the value chain. Conglomerate M&As join firms operating in unrelated businesses and/or markets. Horizontal M&As are more frequent, considering both the number and the value of the deals, adding up to 50% of the total M&A operations and accounting for nearly 70% of the total worldwide M&A value (UNCTAD, 2008).

There has been extensive research on M&As, both from a domestic as well as an international standpoint. A majority of the studies has focused on the pre- and post-

acquisition performance of the firms involved (Healy, Palepu&Ruback, 1992), often with rather conflicting results. Rao and Sanker (1997), for instance, found a positive effect on the liquidity, leverage and profitability of the acquirer firms. Other studies have also showed a positive impact on firms' performance (Hitt, Harrison & Best, 1998; Chevalier, 2004) but several other studies have found that M&As either have no effect or are detrimental to firms' post-acquisition performance (e.g., Harbir& Montgomery, 1987; Jarrell, Brickley& Netter, 1988; Datta, Pinches & Narayan, 1992; Shleifer&Vishny, 1994; Agrawal& Jaffe, 2000; Cartwright & Schoenberg, 2006). In sum, the impact of M&As on firms' performance is not yet conclusive. M&As have been studied in strategic management under diverse lenses. The post-acquisitions integration of the acquired firms has warranted special research attention (Zollo& Singh, 2004), emphasizing issues such as the cultural hazards in integrating different cultures (Jemison & Sitkin, 1986; ; Haspeslagh& Jemison, 1991; Morosini, et al., 1998; Child, et al., 2001;

Clougherty, 2005), the impact of resource relatedness (Chatterjee, 1986; Lubatkin, 1987; Singh & Montgomery, 1987; Seth, 1990b; Chatterjee, Lubatkin, Schweiger & Weber, 1992; Healy, Palepu & Ruback, 1992), the loss of value post-acquisition (Dyer, Kale & Singh, 2004) and the target selection (Haspeslagh & Jemison, 1991). The fact is that many deals have a negative impact on post-acquisition performance for reasons such as poor selection of targets, lack of actual synergies, inadequate integration of the acquired firm (Hitt et al., 2001) and excessive debt resulting from the acquisition effort (Haspeslagh & Jemison, 1991; Hitt et al., 2001). Nonetheless, M&As may be opportunities for firms to reconfigure their businesses, altering their pool of resources and capabilities (Karim & Mitchell, 2000; Ferreira, 2007).

Objectives of the Study

- To study the consequence of acquisition of Sun Pharma Company with Ranbaxy.
- To examine the significance of acquisition on performance of SunPhrama Company after acquisition with Ranbaxy.

Research Questions

1. Does the acquisition of Sun Pharma with Ranbaxy influence its turnover?
2. Is operative profit the consequence of corporate restructuring?
3. Is acquisition a financial strategy to improve Earning per Share?

Development of Hypotheses

Hypothesis: 1

Ho: There is no positive impact on net sales of a company on corporate performance after corporate acquisition.

H1: There is positive impact on net sales of a company on corporate performance after corporate acquisition.

Hypothesis: 2

Ho: There is no significant impact of the net profit of a company on corporate performance after corporate

acquisition.

H1: There is significant impact of the net Profit of a company on corporate performance after corporate acquisition.

Hypothesis: 3

Ho: There is no significant impact of the earning per share of a company on corporate performance after corporate acquisition.

H1: There is significant impact of the earning per share of a company on corporate performance after corporate acquisition.

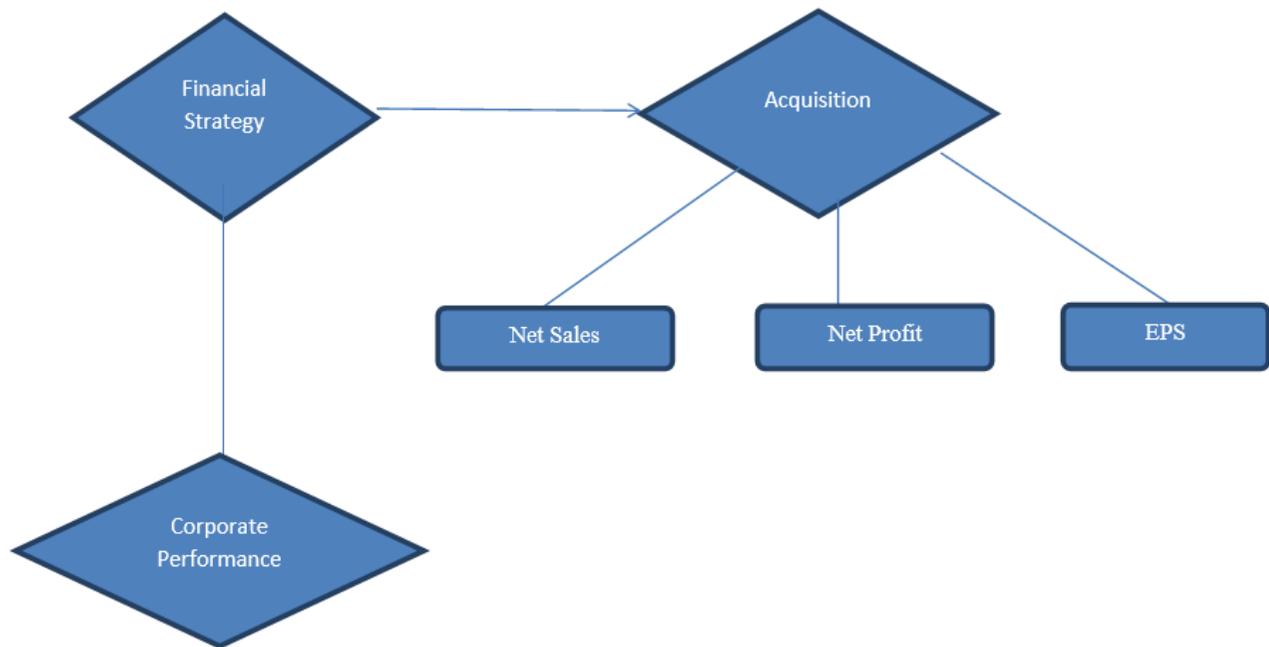
Research Methodology

Data Source

Quarterly Profit & Loss account for the year 2013-14 (Before merger & acquisition) and 2014-15 (after merger & acquisition) of Sun Phrama Company has been taken to show the data analysis and its interpretation.

Research Design and Research Framework

The current study assesses the influence of Acquisition on corporate performance in form of turnover, operating profit and earnings per share. Hence, descriptive research design is adopted to describe the relationship between acquisition and corporate performance as it is concerned with collection of data for the motive of interpreting in course of drawing inference based on the data analysis obtained through Quarterly Profit & Loss account of Sun Pharma Company.



Statistical Tool

SPSS 20 with the help of Paired t – test.

Findings and Discussion

Secondary data for various financial parameters such as net sales, net profit and earnings per share have been considered in current study. Sun Pharma Co. acquired Ranbaxy in 2014. The data used in study consists of the

quarterly profit and loss account of Sun PhramaCompany for the year of 2013-14 and 2014-15. The financial parameters mentioned above were compared between two years (Pre-acquisition period and post-acquisition period).

As per shown in Table 1, the average net sales after acquisition is more than average net sales before acquisition but average net profit after acquisition is in negative. Earnings per share after acquisition is also in negative.

Table 1: Paired sample statistics

	Mean	N	Std. Deviation	Std. Error
Net sales before acquisitions	664.52	4	67.42	33.70
Net sales after acquisitions	836.66	4	557.60	278.80
Net profit before acquisitions	75.21	4	66.91	33.45
Net profit after acquisitions	(109.7)	4	151.99	75.99
EPS before acquisitions	.2133	4	.1903	.1099
EPS after acquisitions	(.5800)	4	.8831	.5128

Table 2: Paired sample correlations

	N	Correlation	Sig.
Net sales before acquisitions & net sales after acquisitions	4	0.872	.130
Net profit before acquisitions & net profit after acquisitions	4	.415	.585
EPS before acquisitions & EPS after acquisitions	4	.564	.618

Table 3: Paired sample test

		Paired Differences					t	df	Sig.
		Mean	Std. Deviation	Std. Error Mean	95% confidence interval of the Difference				
					Lower	Upper			
1.	Before & after acquisitions Net sales	(172.1)	500.06	250.03	(967.84)	623.56	(6.8)	3	.541
2.	Before and after acquisitions – Net Profit	185.00	138.34	69.17	(35.12)	405.13	2.67	3	.075
3.	Before and after acquisitions- EPS	.7933	.7965	.45987	(1.1853)	2.77	1.725	3	0.227

As far as correlations between net sales pre acquisition and post-acquisition is positive. Similarly, net profit and earning per share have positive correlation. The test of significance has been done by using paired t-test. As shown in Table 3, the paired t test table value at 5% alpha level and df 3 is 3.182 which is greater than calculated value (6.8). Hence, null hypothesis no.1 (There is no positive impact on net sales of a company on corporate performance after corporate acquisition) is accepted. In Serial no.2, result for hypothesis no. 2 has been given. According to the result, hypothesis no.2 (There is no significant impact of the net profit of a company on corporate performance after corporate acquisition) has been accepted as P-value (.075) is higher than alpha value (0.05). In serial no. 3, according to the result, hypothesis no. 3 (There is no significant impact of the earning per share of a company on corporate performance after corporate acquisition.) is accepted because P- value (0.227) is higher than alpha value (0.05). It simply indicates that corporate acquisition does not affect positively on earning per share of Sample Company.

Conclusion

In corporate business world, companies are engaged to outpace the competition. In order to enlist in the better position, they are forced to take financial strategy. Basically, financial strategy enables companies to measure financial needs of company and the sources of support required to meet objectives and fulfill the organizational mission for the continued growth and financial stability. It cannot be taken as granted that every time financial strategy can be favourable. In current study, on the basis of analysis and interpretation, it can be said that acquisition between Sun Pharmaceutical Industries and Ranbaxy Laboratories is not favorable considering corporate performances (Net Sales, Net Profit and Earning Per Share). According to Paired t – test, it can be concluded that there is no positive impact of corporate acquisition on net sales, net profit and earning per share. It means restructuring with Ranbaxy, has not created expected amount of profitability and rise in sales as well as earning per share.

Limitation, Implication and Future Study

The first limitation is the inconsistency of results obtained considering various financial parameters. This problem can be solved by future research paying more attention to the selection variables to the financial performance. Researchers have taken only the data of single year which does not reflect the overall financial performance, it can be overcome by focusing more number of years.

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A Study on Exploring Factors of Drug Counterfeiting in India

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Abstract:

The problem of drug counterfeiting has reached to an epidemic level with Asia coming out to be a hub for counterfeiters. The main aim of the present study is to examine the factors responsible for the growth of Counterfeiting in Indian Pharmaceutical industry. An exploratory research was conducted in Delhi, NCR to identify the factors responsible for drug counterfeiting in India and measures adopted by the drug inspectors to eradicate such illicit activities. Personal interviews of drug inspectors, vigilance team members and other officials of drug control department were conducted for the study. Results revealed that though India is facing serious allegations from developed countries as a “promoter of spurious drugs” but the incidents of such fake drugs in India are not much. Factors like huge margins in drugs and delicate enforcement and punishment to the offenders are considered to be the most important factors responsible for fostering counterfeiting activities.

Keywords: Counterfeiting, Drug, Spurious drugs

Introduction

The propagation of counterfeit medicines is one of the most serious issues for Pharmaceutical industry. In order to evaluate the problem of counterfeiting in Indian pharmaceutical industry, it is very important to have a clear distinction between the various types of illicit drugs existing in pharmaceutical industry. World Health Organization (WHO) has given a new name to counterfeit medicines i.e. the substandard, spurious, falsely labeled, falsified and counterfeit (SSFFC) medicines. “A counterfeit medicine is one which is deliberately and fraudulently mislabeled with respect to identity and/or source. Counterfeiting can apply to both branded and generic products and counterfeit products may include products with the correct ingredients or with the wrong ingredients, without active ingredients, with insufficient active ingredients or with fake packaging” [13]. Counterfeit drugs may include products without the active ingredient, with an insufficient or excessive quantity of the active ingredient, with the wrong active ingredient or with fake packaging.

Sometimes legitimate medicines can also be counterfeited.

For example, cases have been discovered where genuine medicines have been placed in counterfeited packaging

to extend the expiry date or to perpetrate fraud against various government initiatives.

Spurious Drug has been defined under Section 17-B of the Drugs and Cosmetics Act, 1940, as amended by the Drugs and Cosmetics (Amendment) Act, 1982. In brief, a drug shall be deemed to be spurious if it is manufactured under a name which belongs to another drug, if it is an imitation of another drug or if it has been substituted wholly or partly by another drug or if it wrongly claims to be the product of another manufacturer [1]. Generic medicines are those pharmaceutical products which are manufactured without a license from the innovator company and marketed after the expiry date of the patent or other exclusive rights. Generic drug is a drug which is manufactured and sold without patent protection or promoted under its chemical name without advertising. A Brand name drug is a drug that has a trade name and is protected by Patent and which can be produced and sold only by the company holding that patent. Medicines sold under their generic name are normally cheaper and affordable because of the low research and development cost. For example, ibuprofen is the generic name of a medicine used as a pain killer. Some companies are selling ibuprofen as branded versions, such as Nurofen and Hedex but other producers, such as Boots or Tesco are promoting it under the generic name “ibuprofen”.

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The Problem

Trading in Counterfeit medicines has a long history such as early as 400 B.C. there have been threats of their presence. The problem of counterfeit drugs emerged in the 1980s when a number of member states of the World Health Organization (WHO) state the illegal trading of counterfeit medicines. It was first brought to a huge attention on an international conference held in Nairobi 1985 and then only the problem of counterfeiting drugs was being acknowledged as an International threat by World Health Organization (WHO) [14]. WHO has received reports related to counterfeit medicines from some of its member states which clearly revealed that the problem is known to involve both from the developed and developing countries. Around 46 confidential reports relating to such drugs were received by World Health Organization (WHO) from 20 countries between January 1999 and October 2000 alone. About 60% of these reports came from developing countries whereas the remaining 40% were reported by developed countries [13]. The drugs counterfeited and reported were antibiotics, hormones, analgesics, steroids, and antihistamines (**Table1**).

World health Organization [13] estimated that out of the world population, one million people dying every year from malaria out of which 200,000 deaths could be avoided if anti-malarial drugs were real, effective, of good quality and used correctly. As per the global counterfeit goods ranking, counterfeited drugs are at the top of the list with the market value of \$ 200 billion [3]. According to the World Health Organization (WHO), a significant portion of the world's drug supply is counterfeit and falsified. Estimates of counterfeit drugs range from 10% to 15 % for the world drug supply, to more than 25% in developing countries [6]. Traditionally, the most frequent types of counterfeit drugs were those explained as "lifestyle drugs" which are being used to treat erectile dysfunction or baldness In CY 2014, incident data was analyzed with respect to six regions of the world by the pharmaceutical security institute which find out that every region experienced a pharmaceutical crime incident with Asia ranks number one in pharma crimes with 952 such incidents [10] (**Figure 1**). In total, there were 119 countries found to have been impacted by pharmaceutical crime. **Figure 2** describes the significant decrease in the pharmaceutical crimes in 2014 as compared to 2013 [10].

Through member and open source reports, Pharmaceutical Security Institute (PSI) reported the arrest of 1,488 persons

involved in various illicit practices of counterfeiting, alteration or proliferation of pharmaceutical drugs worldwide during CY 2014 [7]. **Figure 3** illustrates that Asia has emerged as a number one pharmaceutical crime region for counterfeiters as maximum number of arrests were happened in this region [8]. **Figure 4** describes that in total 2,177 pharmaceutical crime incidents were happened in CY 2014 which involved 686 different pharmaceutical products [10]. Many countries in Africa and parts of Asia and Latin America have regions where more than 30% of the drugs were found to be counterfeit; while other developing countries have less than 10% [2]. As per some estimates, spurious drugs worth Rs. 2500 Crores annually were being propelled into the Indian market [2]. Sri Lanka blacklisted several drug imports from Indian companies for supplying low quality drugs in 2011 [12]. The Central Drug Standards Control Organization (CDSCO), the drug regulatory authority of India conducted a survey in 2009 to reveal the truth behind these allegations of huge proportion of fake drugs being made in India. More than 24,000 samples were collected from all over India and tested [1]. (**Table 2**)

Objective

The main aim of this study is to critically examine the factors responsible for the growth of Counterfeiting in Indian Pharmaceutical industry.

Research Methodology

An exploratory research was conducted in this study to identify the process that is adopted by the vigilance team to stop such activities and during the interview due emphasis was given on the identification major factors responsible for counterfeiting practices in India. Expert's interviews were conducted through unstructured personal interview method. Considering the sensitivity of the topic and unwillingness of respondent to reveal their identity, snowball sampling technique was used.

Area of the Study

The present study is conducted in Delhi, NCR India. The reason for the selection of this region is because in India, the capital has become the notorious location for the manufacturing and transit of counterfeit drugs. The study was conducted from November 2014 to April 2015.

Data Collection

The present study is based on both primary and secondary data. The secondary data were collected from **CDSO** and **Department of drug control (GOI)** and various publications in journals of national and international repute. Data related to counterfeiting in medicines were being collected from government organizations like **WHO** (World health organization), **BASCAP** (Business Action to Stop Counterfeiting and Piracy) and **FICCI** (Federation of Indian Chambers for Commerce and industry) through their online portal. Observation method is used for the meticulous review of data collected from various IP enforcing authorities working at district, state, national or international level. The primary data were collected through personal interview of drug inspectors, vigilance team members and other officials of **Drug Control Department (DCG)**. Altogether 29 experts were approached out of which 13 denied to respond. Sample size of the study is 16 respondents.

Results and Discussions

The study is based upon the opinion of drug Inspectors involved in identifying and curbing counterfeit and substandard drugs in markets. The factors considered for the study were Shortage of manpower, Weak drug regulation and legislation, Weak enforcement and punishment, Corruption and political interference, Lack of awareness among consumer, Unorganized business patterns, High price of medicines and Inefficient cooperation between stakeholders.

1. Inadequate Manpower: Shortage of manpower is one of the most important factors which come into front while interviewing the respondents. They are of the opinion that if more numbers of people are recruited in the team then only better coverage of the territory can be done. They further emphasized that if regular raids in the territory is done then it will certainly have a positive impact in deterring the growth of counterfeiters in Indian pharmaceutical industry.

2. Insubstantial drug regulation and legislation: A competent national drug regulatory authority with the necessary resources is required to control the manufacturing, import, distribution and sale of medicines in the country. According to WHO report “out of 191 member states, about 20% have well developed drug regulation and legislations. 50% are implementing drug regulation at different levels

and the remaining 30% either have no drug regulation in place or a very limited capacity that hardly functions”. Respondents believes that inadequate, ineffective or weak drug regulatory control is responsible for encouraging unregulated importation, manufacture and distribution of drugs, leading to the proliferation of counterfeit drugs in the genuine distribution channels. 40% of the respondents are of considerable opinion that drug regulation and legislation system needs a lot of changes although 60% says that drug regulations in India are rigid, conditionally they should be implemented properly.

3. Delicate enforcement and punishment: To curb the menace of drug counterfeiting, Regulations and legislation of a country will not do alone but it needs to be enforced by the competent regulating authorities. 60 % of the respondents say that existing laws are not enforced to the level as offenders are not afraid of being arrested and prosecuted. Slow process and fewer punishments for offences tend to encourage criminal activities like counterfeiting particularly in medical products. Weak enforcement of legislations and flexibility in the current legal framework is the major factor behind drug counterfeiting in India.

4. Corruption and political intrusion: Indian Pharmaceutical industry is also suffering from the squeeze of corruption and the presence of political pressure, resulting in laws not being enforced and criminals not being arrested, prosecuted and convicted for their crimes. Although clear cut acceptance from the respondents was not there to this factor but they indirectly responded in the favor of corruption and political pressure as another factor responsible for non compliance to enforcement of legislation against drug counterfeiting in India.

5. Lack of attention among consumers: while answering to the awareness part of the consumers/users of medicines, 80% of the respondents agreed that consumers are unaware of the process to be followed in case they found drug having dissimilar taste, effect or any other dissimilarity in packaging etc. They emphasize that although all possible help is provided to the whistleblowers but still very few turned up. So according to the respondents. Co-operation from consumer’s side is prerequisite to the law enforcement authorities.

6. Unorganized business patterns: Almost all 97% of respondents were of the considerable opinion that every consumer while purchasing medicines should ask for

a copy of bill from the seller. They emphasized that if the consumer starts asking for the copy of bill for every single medicine they purchase from the chemist shop, the incidences of fake drug will become negligible. According to the respondents, channel partners used to take advantage of selling drugs without bill which ultimately leads to the mixing of duplicates with the originals.

7. Soaring drug prices: Results suggest that due to the huge research and development costs incurred while innovation and during the Patent period of the drug, medicines were being sold at very high prices. In order to have benefit from price margin, people used to manufacture cheaper versions of patented medicines with low cost of production and large profits which ultimately leads to proliferation of counterfeit drugs.

8. Inefficient cooperation between stakeholders: For the smooth functioning of the system it is mandatory to have mutual cooperation between regulatory authorities, police, and customs services and the judiciary is essential for effective control of the Indian drug market and efficient enforcement of drug legislation. Respondents revealed that sometimes lack of coordination and control leads counterfeiters to escape detection, arrest, and penal sanctions. They emphasize that whenever such cooperation lacks, the national drug authority may not be able to take actions against counterfeiters hence counterfeit medicines tend to freely flourish into the system.

Conclusion and Suggestions

Counterfeiting is considered to be one of the side effects of IP protection. No country or government can deny to their presence in their economies. Strong patent protection leads to monopoly power which gives freedom to the innovators to fix the price of their innovation and high price, high volume business leads to high chances of such illicit activities. The problem of counterfeiting has become a global phenomenon and Asia has become a hub for counterfeiters. India has a rich base in generic drug manufacturing segment due to which it sometimes face allegation from developed countries as a “promoter of spurious drugs”. There are certain incidents reported which indicate that exports of generic drugs from India faces prohibition from entering to some European markets considering them fake.

The present study conducted among drug inspectors and vigilance team members clearly deny such incidents.

Respondents are in the opinion that the incidents of such fake drugs are not much. There are hardly any incidents which were reported in prescription drugs, there are few cases but these are with OTC products like shampoo and beauty creams. They claim that the department is doing all possible efforts to stop such practices. Few factors like huge margins in drugs and delicate enforcement and punishment to the offenders are considered to be the most important factors responsible for fostering counterfeiting activities. Some respondents do believe that consumers buying medicines without bill gives freedom to the chemists to push counterfeit drugs into the legitimate channels.

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Table 1: Report on countrywide survey for spurious drugs, CDSCO 2009

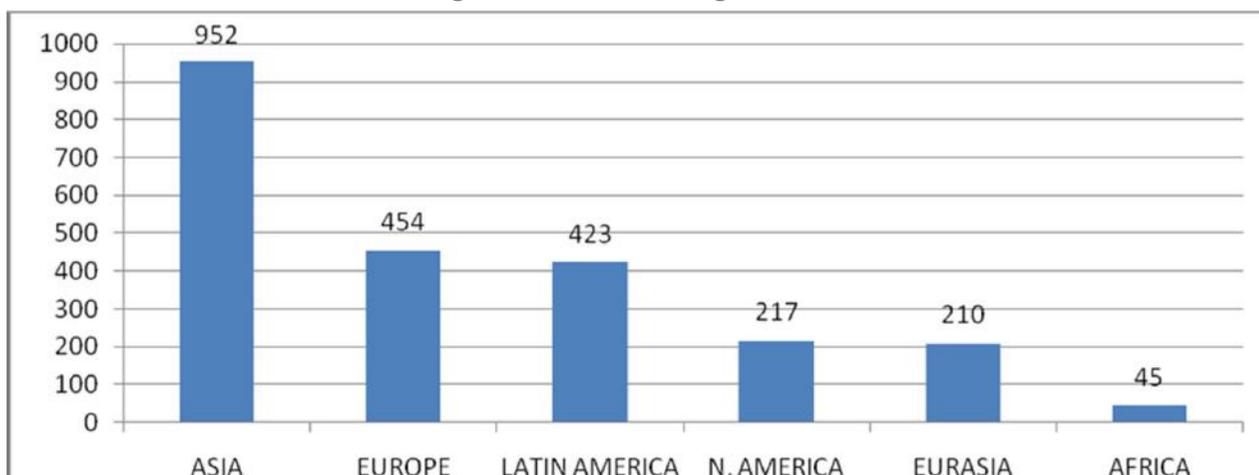
Year	Tested	Not of Substandard Quality	Spurious	Not of Substandard Quality %	Spurious %
1995-1996	32770	3490	100	10.64%	0.30
1996-1997	38936	3189	94	8.19%	0.24
1997-1998	32936	2979	157	9.04%	0.47
1998-1999	38936	3189	94	8.19%	0.24
1999-2000	35570	3666	115	10.31%	0.32
2000-2001	36947	3088	112	8.36%	0.30
2001-2002	38824	3458	96	8.96%	0.25
2002-2003	36314	3395	125	9.34%	0.34
2003-2004	38313	2402	67	6.3%	0.30
2004-2005	49287	3695	144	7.5%	0.29
2005-2006	41494	3017	145	7.3%	0.35
2006-2007	42354	2718	66	6.4%	0.16
2007-2008	38313	2402	67	6.3%	0.17

Source: CDSCO (2009)

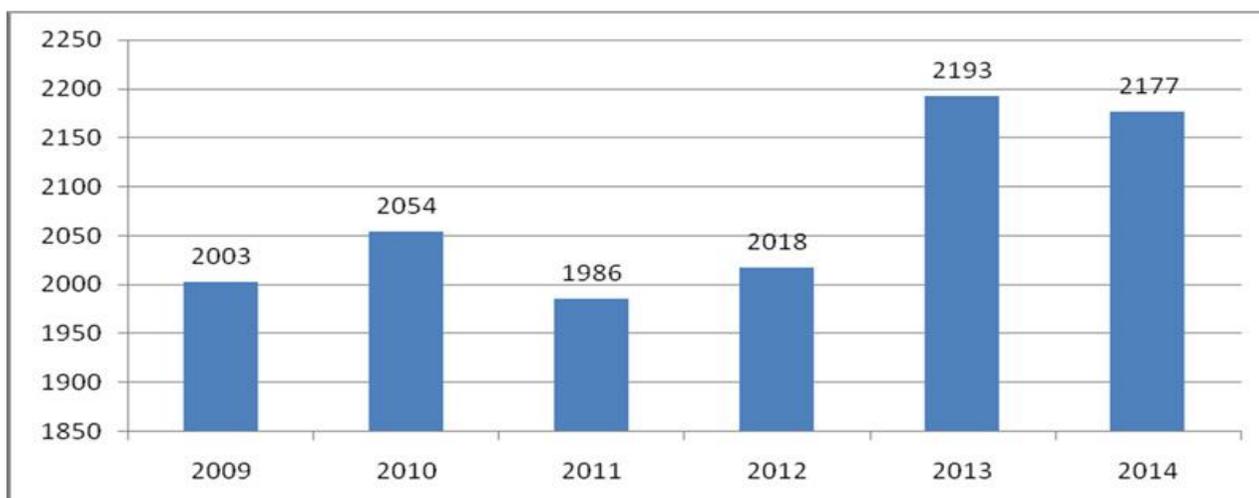
Table 2: Percentage of Illicit products

Products without active ingredients	32.1%
Products with incorrect quantities of active ingredients	20.2%
Products with wrong ingredients	21.4%
Products with correct quantities of active ingredients but with fake packaging	15.6%
Copies of an original product	1%
Products with high levels of impurities and contaminants	8.5%

Source: WHO (2013)

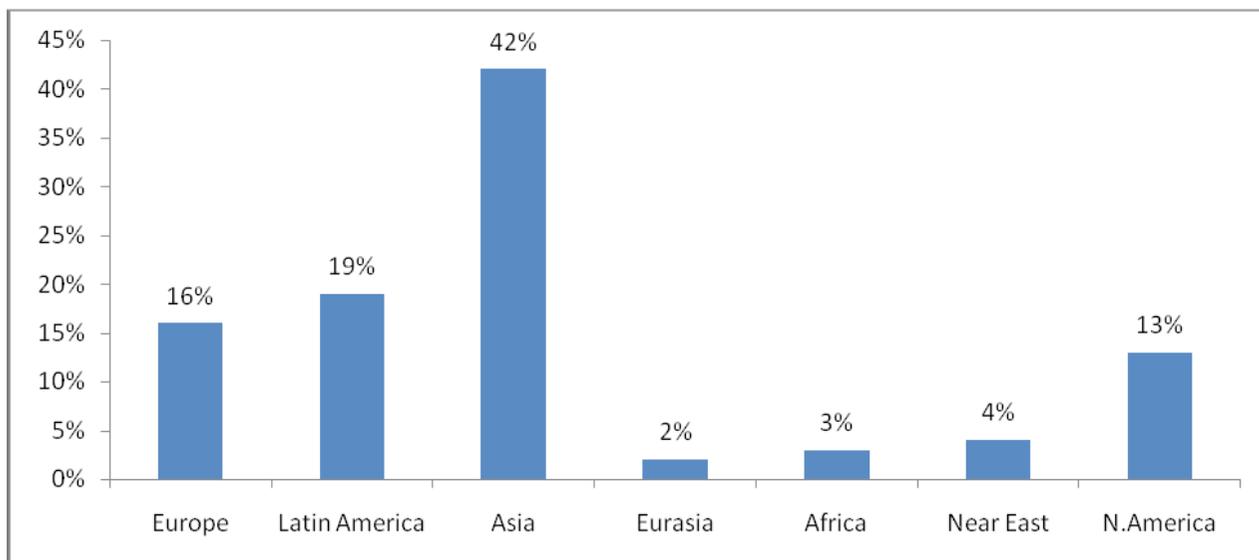
Figure 1: Incidents- Regions of the world

Source: Pharmaceutical Crime Incidents worldwide (2014)

Figure 2: Total Number of Incidents CY-2010-CY2014

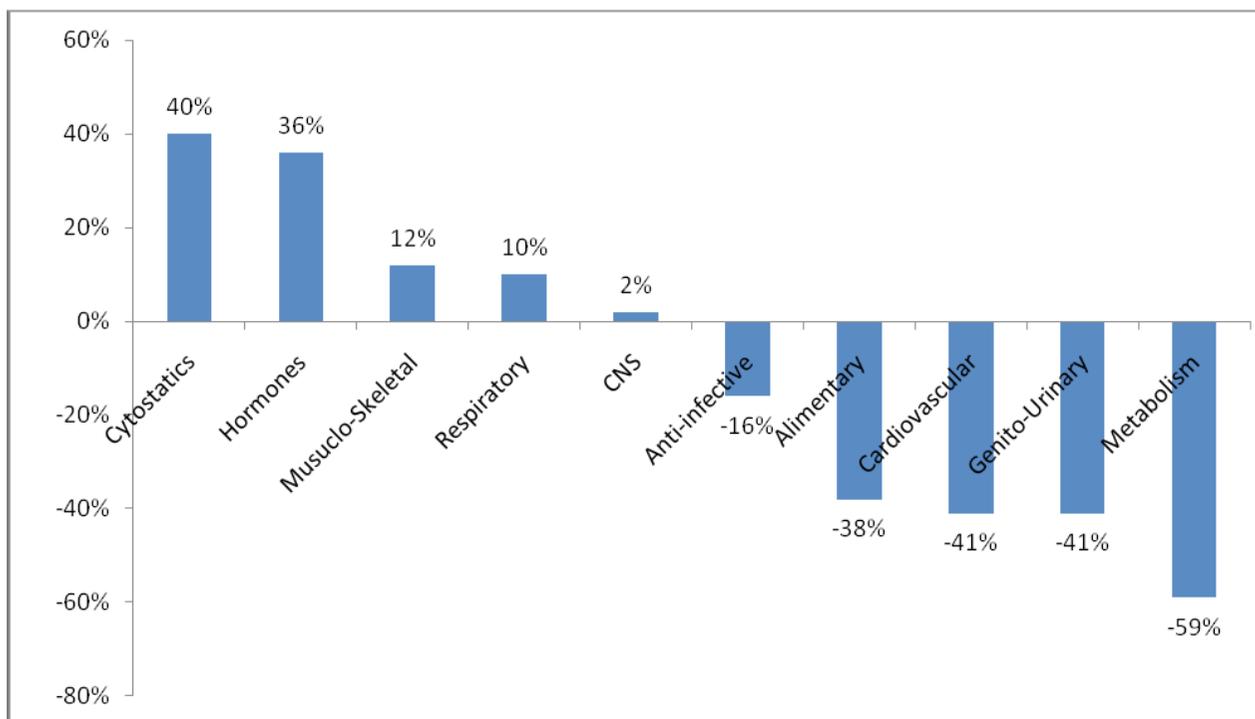
Source: Pharmaceutical Security Institute (2014)

Figure 3: Arrests by Region



Source: Pharmaceutical Security Institute (2014)

Figure 4: Therapeutic Categories Counterfeit Incidents Percentage change CY 2014



Source: Pharmaceutical Security Institute (2014)

Practical Aspects to Indian Financial Reporting Standards: First Time Adoption of Ind-AS

Dr. Chandan Karki*

Abstract:

India has followed the policy of convergence with IFRS instead of adopting as it is since ICAI issued concept paper in 2007. It is expected that drastic changes will be observed in consolidated financial statements of Indian corporate once implemented. The changes will be in reporting practices including revenue recognition, inventory valuation for service sector, accounting for taxes on income, current and non-current classification, valuation of merger and acquisition etc. The ICAI has drafted "Indian Accounting Standard" (Ind-AS) which are in line with IFRS with minor changes keeping in view consistency with legal, regulatory and economic environment of India. These Ind-AS are notified by ministry of corporate affairs but implementation road map is yet to be announced. The present paper is a modest attempt to highlight areas of impact on financial statement including fair valuation which is expected to become major challenge in valuation of business combinations in Indian perspective and summarize the practical difficulties being faced by professionals in implementation of IFRS. The path breaking changes brought about in the new Ind AS especially on revenue recognition aspects, affect almost all the sectors and, therefore, the immediate impact on tax revenue and GDP in the threshold phase can be expected to be higher.

Keywords : IFRS, IndAS, Harmonization, Convergence, Fair Value.

Introduction

Companies are becoming increasingly global with expansion of their business operations, overseas capital raising and global investor profile through merger and acquisition. This has created desirability of adopting a single set of accounting and financial reporting standards. In other words, a generally acceptable accounting and financial language for greater comparability, understandability, reliability and other qualitative characteristics for the accounting and financial statements. The International Financial Reporting Standards (IFRS), are the set of global accounting standards, which have been developed by the International Accounting Standards Board (IASB). The IASB, successor of the International Accounting Standards Committee (IASC) which was established in 1973 to develop International Accounting Standards (IAS). The IASC was a London-based accounting standard setting body set up to develop global standards for financial reporting. The IASB assumed accounting standards setting responsibilities from IASC in 2001.

The term IFRS comprises:

1. IFRS: standards issued after 2001 by IASB
2. IAS: standards issued before 2001 by IASC
3. Interpretations issued before 2001 by the standing Interpretations Committee(SIC), and
4. Interpretations issued after 2001 by the International

Financial Reporting Interpretation Committee (IFRIC)

Convergence with IFRS has gained momentum in recent years all over the world. More than 150 countries now require or allow the use of IFRS, and many other countries are in the process of replacing their local standards with the IFRS or harmonizing local accounting standard with IFRS.

Need For Convergence

The Increasing complexity of business transactions and

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globalization of capital markets has made it mandatory to comply with a single set of accounting rules. A number of multinational companies are expanding their operations in various emerging economies. The developing countries like India is also visiting the foreign capital market for financing their capital needs. It requires them to get listed in foreign stock exchanges and comply with the international reporting standards. Capital markets are thus becoming integrated and easily accessible consistent with the world wide trends. The arguments are also forwarded in terms of inconsistent accounting rules in different countries which creates confusion and less understandability resulting in incomparability.

Benefits of achieving convergence with IFRS

Economy

The international investing environment improves and thus cheaper source of finance are available across the globe. Moreover it maintains orderly and efficient capital markets and helps to increase the capital formation and thereby economic growth.

Investors

Investor requires information which is more uniform, relevant, reliable and timely. The statements prepared complying a common set of accounting standards help investors better understand investment opportunities as opposed to financial statement prepared using a different set of country specific accounting standards.

Industry

The Industry can access and raise capital from any part of the world at lower cost if it can create confidence among investors that their accounting statements comply with single set of standards observed across the globe. Moreover the burden of preparing more than one set of statements to be presented before different stakeholders of different countries is lessened and thereby reduces the cost of preparing the financial statements using different set of standards.

Accounting Professionals

The mobility and opportunities for accounting professional increase manifold if single set of standards are observed across the globe. They can practice as expert professional in different countries.

India's Stand

India has adopted the policy of convergence with IFRS instead of adopting the same. The Institute of Chartered Accountants of India (ICAI) keeping in view the benefit of convergence to Indian economy, its investors, industry and accounting profession, had issued concept paper on convergence with IFRSs in India and had set deadline as 01-04-2011 for full convergence in case of public interest entities with the objective of exploring the approach for achieving convergence with IFRS and laying down a road map for achieving convergence with a view to make India IFRS-compliant. The ICAI examines and considers the IFRSs while formulating the Ind AS (converged Indian Accounting Standard) and departure are made there from wherever required keeping in view the legal, regulatory and economic environment in India. These departures from IFRS are called carve-outs. There are additional disclosure requirements that are necessary to be added in the context of local environment, these are called carve-ins. Afterwards, the Ministry of Corporate Affairs (MCA) issued a press release No.2/2010 on 22 January, 2010, specifying a roadmap of Ind AS implementation for companies other than banking, insurance and non banking finance companies.

Press Release-2/2010 No. 1/1/2009-Ifrs Dated 22-1-2010: A meeting of the core group constituted by the Ministry of Corporate Affairs for convergence of Indian Accounting Standards with IFRS from year 2011 was held on 11 January 2010 and agreed that there will be two sets of accounting standards under section 211(3c) of the Companies Act, 1956.

The first set would comprise Indian accounting standards which are converged with the IFRS which shall be applicable to the specified class of companies. The second set would comprise of the existing Indian accounting standards and would be applicable to other companies, including Small and Medium Companies (SMCs).

The converged accounting standards will be applied to specified class of companies in phases:-

(a) Phase I- The following categories of companies will converge their opening balance sheets as at 01 April 2011

- (a) Companies which are part of NSE- Nifty 50

- (b) Companies which are part of BSE-Sensex 30
- (c) Companies whose shares or other securities are listed on stock exchanges outside India
- (d) Companies, whether listed or not, which have a net worth in excess of Rs 1,000 crores.

(b) Phase II- The companies whether listed or not, having a net worth exceeding Rs 500 crores but not exceeding Rs 1,000 crores will converge their opening balance sheet as at 1st April 2013, in compliance with the notified accounting standards which are convergent with IFRS.

(c) Phase III- Listed companies which have a net worth of Rs 500 crores or less will convert their opening balance sheet as at 1st April 2014, in compliance with the notified accounting standards which are convergent with IFRS.

Companies which fall in the following categories will not be required to follow the notified accounting standards which are converged with the IFRS(though they may voluntary opt to do so) but need to follow only the notified accounting standards which are not converged with the IFRS.

- (a) Non listed Companies which have a net worth of Rs 500 crores or less and whose shares or other securities are not listed on stock exchanges outside India.
- (b) Small and Medium companies (SMCs).

The press release No.3/2010 was issued on 31st March 2010, specifying roadmap for application of the converged Indian accounting standards by the banking companies, insurance companies and non-banking finance companies.

MCA hosted 35 Ind AS which were converged with IFRS on its website on February 2011. As per the road map issued by the MCA, in the first phase, about 300 to 400 entities were likely to be covered by the Ind AS. These 35 Ind AS were based on the IFRS issued on 1st April, 2011. Subsequently, not only significant amendments have been made in IFRSs, but new IFRS have been issued. The ICAI has from time to time revised Ind AS keeping in view these amendments.

Union Finance Minister, Shri Arun Jaitely, in his Union Budget speech 2014-15, stated that corporate India would implement the Ind AS on voluntary basis effective from 1st April, 2015 and on compulsory basis effective from 1st April, 2016. The Institute of Chartered Accountants of India in line, submit a roadmap to Ministry of Corporate Affairs as follow:

1. Two set of accounting standards shall be implemented. First Ind AS (converged with IFRS) and second existing notified accounting standards (AS)
2. Ind AS will be applicable for financial year beginning on or after 1st April 2016 along with comparatives for year ended 31st March 2016 or thereafter for
 - (a) Listed companies or companies which are in the process of listing on any stock exchange in India or outside India;
 - (b) Companies not covered in (a), having net worth in excess of Rs 5 billion; and
 - (c) Holding, Subsidiary, Joint Venture or Associates of companies covered in (a) or (b) above.
3. Other companies will be having an option to adopt Ind AS. However one adopted, cannot revert back.

Broad Challenges In Implementation

(a) Awareness about international practices

Adoption of converged IFRS shall require restatement of entire set of financial statements and redesigning of internal control system. There are many differences among existing set of Indian GAAP's and IFRS . This may cause the users of financial statements to look at them and analyze from a new perspective. Nevertheless it would be a challenge to bring about awareness of IFRS and its impact among the users of financial statements.

(b) Training

Professionals bodies like ICAI are looked upon to ensure successful implementation of IFRS. The biggest hurdle for the professionals in implementing IFRS is the lack of training facilities and academic courses on IFRS in India. It is observed that there is acute shortage of trained

IFRS professionals. There is need that professionals in the organization should be trained and IFRS should be introduced as a full time subject in the universities.

(c) Amendments to the existing law

It is observed that implementation of IFRS may result in a number of inconsistencies with the existing laws which include the Companies Act 2013 (erstwhile Companies Act, 1956), SEBI regulations, banking laws and regulations and the insurance laws and regulations. Currently, the reporting requirements are governed by various regulators in India and their provisions override other laws. IFRS does not recognize such overriding laws. Although steps to amend these laws have been initiated, the respective regulator need to ensure that the laws are amended well advance in time so that specific law could be IFRS compliant.

(d) Taxation

IFRS convergence would affect most of the business transaction and therefore the financial statements and consequently the tax liabilities would also undergo a change. The taxation laws require restatement of financial statement to arrive at taxation liability. The taxation laws should address the treatment of tax liabilities arising on convergence from Indian GAAP to IFRS. It is also extremely important that the taxation laws recognize IFRS compliant financial statements otherwise it would duplicate administrative work for the organizations.

(e) Fair value

IFRS uses fair value as a measurement base for valuing business transactions of financial statements. The use of fair value accounting can bring a lot of volatility and subjectivity to the financial statements. It also involves a lot of hard work in arriving at the fair value and valuation experts have to be hired. Moreover, adjustments to fair value result in gains or losses which are reflected in the income statements. These adjustments would bring fluctuation in the annual figures of assets and liabilities. Whether this can be included while computing distributable profit is also debated because how fair is fair value also raise several questions.

(f) Management compensation plan

The terms and conditions relating to management compensation plans would also undergo fresh negotiations. This is because the financial results under IFRS are most likely to be different from those under the Indian GAAP. The contracts would have to be re-negotiated which would pose big challenge.

(g) Reporting systems

The disclosure and reporting requirements under IFRS are completely different from the Indian reporting requirements. Companies would have to ensure that the existing business reporting model is amended to suit the reporting requirements of IFRS.

The internal control system and information systems should be redesigned to capture new requirements related to fixed assets, segment disclosures, related party transactions, to name a few. Existence of proper internal control and minimizing the risk of business disruption should be taken care of, while modifying or changing the information systems.

Hurdles In Harmonization

(1) Substance over Form

The substance of transaction is given first priority than its legal form for instance debt equity classification, sale with retention of risk and rewards, sale contracts with rights to re-purchase.

(2) Fare Valuation

IFRS has adopted variable blend of both historical cost and fair value measurement. for instance biological assets are to be valued at fair value, whereas both cost and fair valuation is allowed for investment, PPE and intangible assets.

(3) Principle Based

There is freedom of subjectivity in the sense that the IFRS are principle based rather than rule based. There are many areas which have been left to the judgment of the preparers. For instance, the application of fair valuation is also matter of subjectivity in many application.

(4) Emphasis on Statement of Financial Position

The financial position at the end of reporting period is given more emphasis in the presentation rather than the performance over the period. For instance income and expenses are recognized corresponding to increase or decrease in assets and liabilities which leads to increase or decrease in the equity of the entity other than from contribution from the equity participants.

Specific Challenges

(1) Revenue Recognition

Under current AS, revenue is recognized either on transfer of property in the goods or transfer of significant risk and rewards of ownership. Whereas under Ind AS, revenue will be recognized only when the transfer of significant risks and rewards of ownership and effective control over the goods has been transferred. The revenue recognition principle is going to substantial changes for different industry. For instance IT companies often enter into composite contracts for sale of software, its implementation, maintenance and after sale services. Under IFRS, the substance over form is to be considered to ascertain whether the various part of contract is to be treated as single contract or each part to be treated as separate contract. In this case sale of software shall be governed by general revenue recognition criteria whereas for sale of other services the revenue has to be recognized when services are actually provided on percentage of completion basis. Under Ind AS, when an arrangement includes more than one component, it is necessary to account for the revenue attributable to each component separately. Similarly real estate companies currently follow percentage of completion method for recognizing revenues and costs from sale of properties. This sale of property is the contract of construction services wherein developer would transfer property to customer in future and this itself does not transfer the risks and rewards of ownership to the customer until customer takes the possession of the property Applying IFRS to this industry revenue shall be recognized for substance of transaction which means that revenue shall be recognized when finally transfer of property takes place. However this shall not impact Ind AS and revenue for real estate shall continue to be recognized on percentage of completion of construction method.

(2) Customer Incentives and Discounts

On various occasions companies offer discounts and freebies to customers to boost their sales. Under existing Indian GAAP, such discounts and freebies are recognized as sale promotion expenses while sales are reported at gross figure. The difference under IFRS is that such discounts and freebies has to be adjusted in sale figure, that would reduce gross sales and ultimately sales ratios.

(3) Award Credits and Loyalty Points Programmes by Airlines, Hotel etc.

Under current GAAP, certain companies make provision for redemption of the award credit based on the actual costs that will be incurred to honour the award credits in the absence of any specific guidance note. Under Ind AS, these award credit and loyalty programmes are to be considered separate contract/component of the sale. Therefore fair value of the award credit/loyalty points is separated from the initial sale and deferred till such award credits/loyalty points are utilized.

(4) Fair Valuation

IFRS 13- Fair Value Measurement provides guidance regarding how to determine fair value and prescribe the required disclosures about fair value measurements. The fair value is defined as "The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date". The standard prescribes fair value hierarchy of inputs to be used for measurement of assets and liability at measurement date.

Level 1- Quoted price in active markets for identical assets and liabilities that the entity can access at measurement date.

Level 2- Inputs other than quoted market prices including within level 1, that are observable for the assets or liability either directly or indirectly.

Level 3- Unobservable inputs for assets and liability Further it requires various disclosures depending on the nature of the fair value measurement (e.g. whether it is recognized in the financial statements or merely disclosed) and the level in which it is classified.

Therefore following factors should be examined in fair value measurement.

- (a) **The asset or liability:** The particular asset or liability for which fair value has to arrived at entails different characteristics. These characteristics are considered when one goes for purchasing an asset or discharging a liability. Therefore these characteristics should be considered from the market participants perspective and not from the seller's perspective.
- (b) **The transaction:** The fair value has to be determined based on a transaction that would take place in the principal market or in the absence of principal market, the most advantageous market. The principal market is defined as that market where greatest volume and level of activity for the asset or liability is undertaken. The price traded in principal market must be used as fair value. Here management has to identify principal market. The principal market or most advantageous market has to be determined on the basis of ability of the reporting entity to access that market on the reporting date. Therefore it would happen that different reporting entity may have access to different principal or advantageous market and would end up at different fair value for same class of asset or liability.
- (c) **Market participant:** These are buyer and sellers in the principal or most advantageous market for the asset or liability that are independent of each other (not related to each other in the context of IAS 24), having reasonable knowledge and understanding about the asset or liability and the transaction using the possible information available or could be available through due diligence, able to enter into the transaction and willing to enter into the transaction.
- (d) **Price:** The price should depend upon expectation of future cash flows from the perspective of market participant. Therefore fair value is always based on exit price i.e. the price that would be received to sell an asset or would be paid to discharge a liability. The transaction price or entry price is not the fair value.

(5) Business Combination

Under current Indian GAAP, accounting rules are prescribed for recording merger of two companies to form a new company or the merger of one company into another

company. Further for acquisition of a group of assets that constitute a business and for acquisition of a subsidiary, different principles are prescribed. Under Ind AS, Business Combination is defined as a transaction in which an acquirer obtains control of one or more businesses. Furthermore business is defined as an integrated set of activities and assets that are capable of being conducted and managed to provide a return to investors by of dividends, lower costs or other economic benefits. Therefore a purchase of assets not constituting a business does not lead to recognition of goodwill. The acquired company or group of assets constitutes a business is an area involving judgment.

Accounting method prescribed: Ind AS prescribe respective acquisition method of accounting for all types of business combination be it is merger, acquisition of subsidiaries, acquisition of a group of assets etc. It requires net assets of acquirer's company to be recorded at fair value and consideration to be paid for business combination to be valued at fair value. Further more Goodwill arising on acquisition is tested for impairment annually, Whereas under current GAAP, Goodwill arising on acquisition is amortized over a maximum period of five years. Goodwill arising is tested for impairment or amortized over determined period. Thus once Ind AS become operational, a number of transaction which were carried out in the form of an asset acquisition would be in the form of business combination.

Anomaly- Companies Act 2013 And IFRS

There are gaps existing in the provisions on various issues between Companies Act and IFRS. Some are addressed so far but still significant task has to be done to reduce these anomalies. Few are on following issues:

- (a) **Depreciation:** Ind AS-16 on Property, Plant and Equipment requires that *"The residual value and the useful life of an asset shall be reviewed atleast at each financial year end, and, if expectations differ from previous estimates, the change in accounting estimate in accordance with Ind AS 8 Accounting Policies, Changes in Accounting estimates and Errors"*. The Companies Act 2013, section 123 requires that depreciation shall be provided in accordance with Schedule II-Part C. It specifies the useful life of the assets. However the Schedule restrict the residual value of an asset to be not more than 5 % if the original cost of asset. Therefore as per Ind AS-16, the revision

of residual value can be upward and downward at every year end but Companies Act putting maximum upward ceiling of 5 %.

- (b) **Consolidation:** Sec 129(3) of Companies Act 2013, provides that a consolidated financial statement of the company and of all the subsidiaries shall be prepared. Explanation to this section provides that subsidiary shall include associate company and joint venture. Whereas IFRS does not provide for consolidation other than one which are controlled. It categories those that are significantly influenced as associate and joint venture. For these entities consolidation is not to be done under IFRS.
- (c) **Statement of Changes in Equity:** Ind AS-1 (Presentation of Financial Statements) provides for preparation of Statement of Changes in Equity as part of financial statements. Whereas Companies Act does not provide for such statement as part of presentation of financial statements.
- (d) **Dividend Recognition:** As per IndAS-18 the dividend income is recognized as income once shareholder is entitled to receive the dividend. The entitlement gets established when dividend is declared by board of directors. Whereas as per section 126 of Companies Act, provides for a situation wherein if transfer of share has been lodged but such transfer has not been registered by company due to any reason for instance transfer instrument is not properly executed or stamped, then company is required to transfer dividend on such share to special account under section 124 of the Act known as unpaid dividend account with any bank.
- (e) **Deviation from Accounting Standard:** Section 129(5) of the Companies Act provides for, “where the financial statement of a company do not comply with the accounting standards referred to in sub section (1), the company shall disclose in its financial statements, the deviation from the accounting standards, the reasons for such deviation, and the financial effects, if any, arising out of such deviation”. The Ind AS-1, Presentation of Financial Statements, requires that an entity whose financial statements comply with Ind ASs shall make an explicit and unreserved statements of such compliance in the notes. Therefore an entity shall not claim their financial statement as

complying with Ind AS unless they comply with all the requirements of Ind ASs.

IFRS for Banking Sector

Apart from several challenges along the path to converge to IFRS the banking sector has to face specific additional issues because of their uniqueness and regulatory frameworks

- (a) Banking companies are required to observe various accounting policies, procedures, and principles that are prescribed by RBI for e.g provisioning provisions that require significant alteration if IFRS are adopted.
- (b) Application of IFRS in areas such as provisioning and impairment of assets require a high level of judgment and would require significant changes in the financial reporting processes.

The specific accounting challenges for banking industry are:

Fair Valuation for Financial Instruments: All financial assets and liabilities will need to be measured at fair value while in number of cases, fair values may be represented by transaction prices, the onus on banks will be to prove that transaction prices represent fair value.

Derivatives and Hedge Accounting: It would involve increased documentation, hedge effectiveness testing and ineffectiveness measurement. The Indian GAAP does not specifically address these challenging issues which are difficult to apply in the current scenario of Indian banking industry.

Consolidation of Entities: In a number of ways, IFRS provide more rigorous consolidation test and in practice can result in the consolidation of larger number of entities as compared to Indian GAAP which focuses on a narrower set.

According to August 2008 report titled ‘IFRS convergence: Challenges and Implementation Approaches for Banks in India’, the financial impact of convergence with IFRS will be significant for banks in India, particularly in areas relating to NPA, provisioning, financial instruments and derivative accounting. This is likely to have a significant impact on financial position and financial performance

directly affecting key parameters such as capital adequacy ratios and outcomes of valuation metrics that analysts use to measure and evaluate performance of a banking company.

Preparedness of Banking Industry

A working Group Committee has been formed by the Indian Bank's Association (IBA) to formulate new set of guidelines to converge financial statements to IFRS. Banks are hiring consultants to train their employees in international financial reporting standards. Large Indian banks, which have the experience of complying the process of international GAAP such as US GAAP in the past, have recognized the challenges of convergence and have already planning their detailed roadmap to achieve a smooth convergence. It is time for banking regulators to initiate the convergence process for other banks and facilitate the necessary systems. Critical to the successful implementation of IFRS in the Indian context would be the level of regulatory sponsorship, the appropriate level of investment in systems and processes and consistency in market practices for areas where judgment is critical.....

Conclusion

After speech of Finance Minister on 10th July 2014, which gave clear indication for urgent implementation of converged IFRS in India, every professional, regulator and standard setters doing every possible effort and reassessing many aspects like education system, preparedness and extent of convergence. The corporate India is still have many apprehensions and questions that need to be clarified. There are issues which have already been efficiently addressed but a lot needed to be done to minimize anomalies under various statutes especially when we endeavors for harmonization with internationally accepted accounting standard. IT capabilities and systems, transition provisions, implication on taxes are few areas that need further overhauling.

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Human Resources Information System and Impact on Human Resources Planning

Trisnawati*

Abstract

The purpose of this study was to determine whether there is significant human resource information system to the Human Resources planning in the context Indonesia. This research was inspired by Dr. Shikha N. Khera and Ms. Karishma Gulati (2012), they stated that the HRIS provides positive influence on the planning of human resources in the company. In the context of Indonesian, research conducted in line with the results of research, HRIS a positive influence on the planning of employees at PT. Telekomunikasi Indonesia and the Secretariat General of the Ministry of Energy and Mineral Resources. But the application of HRIS in Indonesia is still limited to employees in the company as not reached the stage of recruitment and selection.

Keywords: *human resource management, human resource information system, employee*

Introduction

The most fundamental understanding of the HRIS (Human Resources Management System) is a system used to acquire, store, manipulate, analyze, retrieve and distribute information related to the organization of human resources. It is often regarded as a service provided to the organization in the form of information (Tannenbaum, 1990). The use of HRIS depends on several factors as described by Broderick and Boudreau (1992) that the use of HRIS system is determined by the human resources strategy, read it as an appropriate process between the different strategies and practices different systems.

Human resource planning or Human Resource Planning (HRP) is generally ignored in most organizations (Vareta, 2010). Cherian (2011) defines HRP as the process of forecasting demand and supply of human resources by hiring the right employees, and has the right skills (corresponding job) according to the needs of the organization. Human resource planning is a process of translating business strategy into the human resource requirements both qualitatively and quantitatively through certain stages. Understanding and Strategic HR Planning Mondy and Noe (1995) define HR Planning as a process that systematically examines the state of human resources to ensure that the quantity and quality with the right skills will be available when they are needed". Then Eric Vetter in Jackson and Schuler (1990) and Schuler & Walker (1990) defines the planning of human resources (HR Planning) as; process management in determining the

movement of the human resources of the organization's current position to the desired position in the future. From this concept, human resource planning is seen as a linear process, using past data and processes (short-term) as a guide to future planning (long-term).

This paper, will further elaborate on the analysis of HRIS activities that assist in human resource planning and strategic activities of the HR manager, employee training and development of succession planning, applicant tracking in recruitment and selection, and labor planning. Then at the end of the text, will be disclosed to the HRP HRIS effect that is applied in the context Indonesian.

Theory

Human Resources Information System

Siriwal Tevavichulada (1997) that originally HRIS intended to regulate employees because its function is to store and manage the human resources department but now HRIS is not limited to storage only, but includes a wide range of fields associated with employees as workforce planning, labor demand and supply forecasting, job descriptions and applicants for employment, recruitment and selection, training and development, negotiation, complaint management etc. (Kenneth A. Kovach and Charles E. Cathcart (1999).

Dr. Shikha N. Khera and Ms. Karishma Gulati said that human

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resources are an asset to any organization and particularly the IT organization where employees act as storehouse of talent. Because of the importance of human resources, human resource planning (HRP) should also be the center of attention. To take advantage of employee efficiency possible. So it is very important to have a complete picture of the employee as well as the jobs available. Sometimes employees can be a legacy for the organization but can not do the best thing for the company with the current job position. Second, improvement and employee shortages also affect the state of the company. HRP can help companies to overcome these challenges. Not only that, the performance assessment needs to be managed properly in order to be the crest factor to motivate employees in the organization and HRP help in this regard also by analyzing the employee. Doing this manually is complex and HRIS can solve this problem.

This research work focuses on the contribution of HRIS at HRP. The literature reviews the importance of HRIS with the various subsystems, but very rare find journals that discuss the role of HRIS for HRP. The most challenging aspect in the discussion of this research paper is a comprehensive issue of the role of HRIS at HRP in excess and strategic applications.

Human Resources Planning Role in the Company

Handoko (1992) state human resource planning involves determining the positions to be filled and the skills needed employees to perform these tasks, the number of employees needed, understanding the labor market, and consideration of the demand and supply of human resources. Werther and Davis (1993) state human resource planning is forecasting a systematic organization to look at the future of the supply and demand of labor to determine the number and type of labor required, where the human resources department can plan the steps of withdrawal, selection, planning cadres and other human resources activities, and Mondy and Noe (1990) mentions human resource planning is a process that systematically check the requirements of human resources to ensure that the required number of employees with the required skills, available when required. It is the process of combining the availability of human resources inside and outside the company with the anticipation of a new job vacancy at a time or period.

Thus basically planning of human resources is to decide on the quality and quantity of human resources required by the organization, or it can be said the planning of human resources is a process in finding the right person who prepared the right place and at the right time (The Right Man

in The Right Place and The Right Time).

HRIS Implementation of HRP in Indonesia

In its application HRIS in Indonesia also positively affects human resource planning. Research conducted by Wiwiek Irmawati (2010) states that SIPEG positive and significant impact on human resource planning. SIPEG give better effect to the employees or to the development of performance assessments. HR planning to use the data current and accurate as produced by SIPEG, in order to obtain human resources according to the needs of the organization

In addition, research conducted Eka Top Kadharpa Dewayani [2011] states the implementation of HRIS at PT. Telecommunication Indonesia. Tbk has been in accordance with the company's goals, HRIS Implementation effect on employee empowerment in the company. Several processes and methods in HRM practice can be done online so support the daily activities of the employee's job. Implementation of HRIS provides convenience in making knowledge sharing so that each employee can access all the knowledge that is needed at any time. From the existing research HRIS usage in Indonesia is still limited to the planning staff, has not reached the stage of the recruitment and selection of employees.

Research Purposes

To explore the overall contribution of the HRIS in human resource planning

Research Methodology

Population Research and Data Collection Methods

The study population consisted of 127 respondents from the top seven IT companies in India have taken to distinguish the role of HRIS in workforce planning in their company. The design study is exploratory. Data for this study were obtained mainly from primary sources and secondary sources. Primary sources include employees of the IT organization fill out a questionnaire directed to research. Data were also gathered from secondary sources, including the Internet, websites etc. The technique used is the survey and interviews, and for data analysis used SPSS statistical package. Exploration research paper aims to explore the role of HRIS in the planning of human resources in the IT organization.

Independent Variables	Dependent Variables Application of Human Resource Information System for Human Resources Planning
HRIS analyze each job description	0,568
HRIS organize various employee skills (skills, capabilities, qualifications and career goals).	0.537
HRIS regulate the relationship between individual applicants (applicants) with the availability of talent in the company	0.184
HRIS eliminate applicants who do not fit and focused on the most promising candidates	0.252
HRIS place employees in the right place and the right time	0.347
HRIS subsystem implemented with proper recruitment	0.207

Results and Discussion

Correlation between the various phases and sub-phases of Human Resource Planning and Implementation of Human Resource Information System for Human Resources Planning All values significant correlation in the above table to interpret that HRIS assist in all phases of HRP including analyzing job descriptions, set the range of skills of employees and regulate the relationship between individual applicants (applicants) with the availability of talent, eliminate applicants who do not fit in and focus on the most promising candidates, implementation of proper recruitment subsystem and place employees in the right place and the right time.

The study confirms that by implementing HRIS, IT organizations can have full control over their organizations HRIS assist organizations in planning of human resources both quantitatively and qualitatively. A source of information for human resources, can save a lot of data about employees, besides helping in identifying the position of employment for employees. Not only that but also can identify whether that person how at certain positions that are suitable for the job or not.

Conclusion

This research main focus is on another benefit of HRIS. This research is very useful for studies that discuss the relationship between HRIS with HRP very rare. This study identifies the HRIS benefit not only in terms of human

resources processing but also include the company's strategy in managing HR. The results showed other benefits include HRIS:

1. Decisions on HR healthier, supervision and control of labor can be improved.
2. HRIS help reduce various costs such as labor costs, recruitment costs etc. because the computerized system.
3. HRIS exert tremendous strategic activities by HR managers. These activities include training and management development, succession planning (identifying key positions and their needs), applicant tracking recruitment and selection and manpower planning, personnel information and identification (attendance tracking, etc.), planning salary, analysis of attendance, analysis of turnover and scheduling work.
4. HRIS also assists in tracking employee attendance to determine the regularity and their devotion to the organization. This not only helps in the planning of salary but also performance management.
5. In essence, it can be concluded that the HRIS is an excellent tool for human resource planning, although there are actions that can not be fully done by HRIS.

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MPEG4 AVC H.264 Codec Matrices for Advanced and Baseline Profile Covering PSNR and SSIM

Nisha Sadyan*

Abstract:

In this we will prove that H.264/AVC provides gains in considerable compression efficiency over a wide range of bit rates and video resolutions compared to previous standards, for example MPEG-1, MPEG-2 and MJPEG. However the decoder complexity is about four times that of MPEG2 and two times that of MPEG4 Visual Simple Profile. MSU VQMT has been used to measure qualitative PSNR and SSIM indexes of the input video samples. The MSU VQMT provides functionality for both full-reference and single-reference comparisons for video file under comparison. The Selection of PSNR and SSIM is done mainly because the objective matrices provide comprehensive evaluation of the overall video samples.

Keywords— H.264, AVC, video compression, Video Comparison. Video Quality Matrices. MSU VQMT, Avisynth

Introduction

The digital video compression technology has been gaining popularity for many years. Today, when people enjoy HDTV [1] (high definition television), movie broadcasting through Internet or the digital music such as MP3, the convenience that the digital video industry brings to us cannot be forgotten.

All of these should attribute to the advances in compression technology, enhancement on mass storage media or streaming video/audio services.

The core of the MPEG-4 standard was developed early twenty first century [2]; however MPEG-4 is an existing standard with new parts added continuously as and when technology exists to address evolving applications [3].

The significant advances in core video standard were achieved on the capability of coding video objects, while at the same time, improving coding efficiency at the expense of a modest increase in complexity.

PSNR (peak signal to noise ratio) [4] is defined as the measured on logarithmic scale and depends on the mean squared error (MSE) of between an original and an impaired image or video frame.

$$\text{PSNR} = 10 \log_{10} \left[\frac{(2^n)^2}{\text{MSE}} \right]$$

SSIM (structural similarity) metric is based on the evaluation of three different measures, the luminance, contrast, and structure comparison measures which are computed as

$$l(x,y) = \frac{2\mu_x \mu_y + C_1}{\mu_x^2 + \mu_y^2 + C_1}$$

$$C(x,y) = \frac{2\sigma_x \sigma_y + C_2}{\sigma_x^2 + \sigma_y^2 + C_2}$$

$$s(x,y) = \frac{\sigma_{xy} + C_3}{\sigma_x \sigma_y + C_3}$$

Given the above measures the structural similarity can be computed as

$$\text{SSIM}(x,y) = [l(x,y)]^\alpha \cdot [C(x,y)]^\beta \cdot [s(x,y)]^\gamma$$

These two are the comparison parameters.

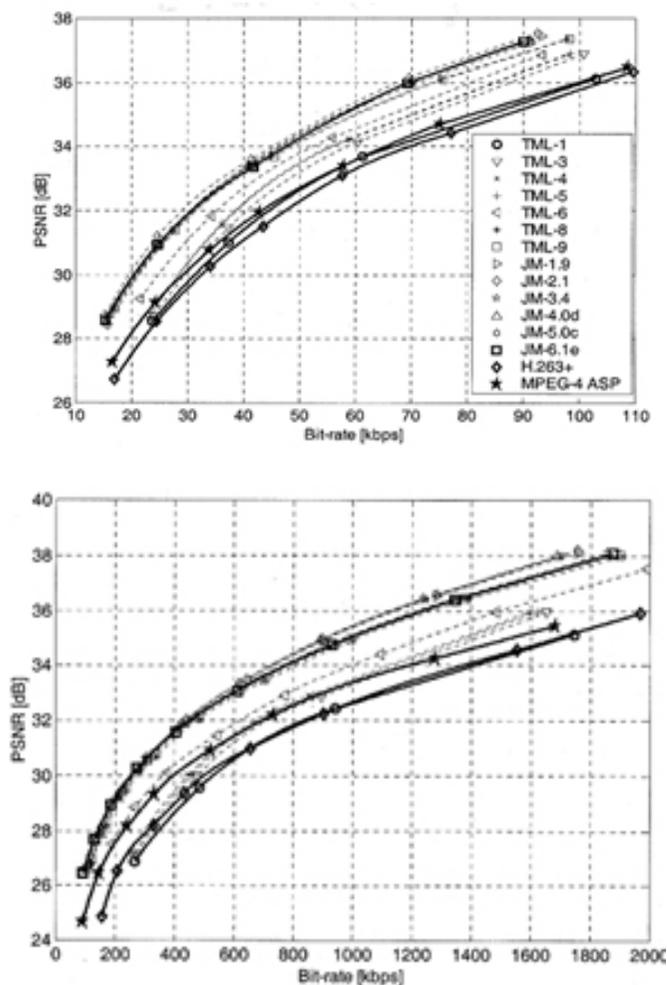
Literature Survey

Paper [4] proposes to port the H.264/AVC decoder on the various processors such as TI DSP (Digital signal processor), ARM (Advanced risk machines) and P4 (Pentium processors). The paper also proposes to analyze and compare Video Quality Metrics for different encoded video sequences. The paper

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proposes to investigate the decoder performance on different processors with and without deblocking filter and compare the performance based on different video quality measures and concludes that TI DSP performs better than the other processors for implementing H.264 decoder without deblocking filter than any other processors. Also the decoding time for TI processor is less compared to other processors considered.

The main goals of the H.264/AVC Standardization effort have been enhanced compression Performance and prerequisite of a “network-friendly” Video representation addressing “conversational” (video Telephony) and “no conversational” (storage, broadcast, or Streaming) applications. H.264/AVC has achieved a significant improvement in rate-distortion efficiency Comparative to existing standards. [9]



Paper [5] provides an overview of the technical features of H.264/AVC, describes profiles and applications for the standard, and outlines the history of the standardization process.

Paper [6] proposes study and analyzes the computational complexity of a software-based H.264/AVC baseline profile decoder. The analysis is based on determining the number of basic computational operations required by a decoder to perform the key decoding sub functions. The frequency

Figure: 1. Evolution of H.264/AVC since August 1999 until March 2003. Top: QCIF sequence bottom: CIF sequence tempted. The legend in the top figure indicates the various versions that have using typical H.264 settings [4]

of use of each of the required decoding sub functions is empirically derived using bit streams generated from two different encoders for a variety of content, resolutions and bit rates. Using the measured frequencies, estimates of the decoder time complexity for various hardware platforms can be determined. The paper study the computational complexity of the H.264/AVC baseline decoder using both theoretical and experimental methods and theoretical estimates are derived using bit streams generated from two different encoders for different content, resolution and bit rates. Together with hardware-specific cycle counts for each basic operation (e.g., add, shift) as well as measured numbers of computational operations for each sub function (e.g., interpolation); the resulting frequencies can be used to estimate the H.264/AVC baseline decoder time complexity for various hardware platforms. The resulting estimates are on average 3.6 times lower than measured values, and this is expected since we do not account for loop overhead, flow control, and boundary-condition handling, as well as instruction and data cache misses and operation latency in theoretical analysis. Also study the behavior of the H.264/AVC baseline decoder as a function of encoder characteristics, content, resolution, and bit rate. Moreover, we demonstrate, through the use of similarly optimized decoders on the P3 platform, that the H.264/AVC baseline decoder is two to three times higher in terms of time complexity than an H.263 baseline decoder. Finally, conclude that H.264/AVC was still an evolving standard, and the final baseline decoder may differ from the decoder analyzed in this paper.

Paper [7] MSU Video Quality Measurement Tool (VQMT) is a program for objective video quality assessment. It provides functionality for both full-reference (two videos are examined) and single-reference (one video is analyzed) comparisons. MSU VQMT program allows using different metrics for comparison (common - **PSNR, Delta, VQM, SSIM** and our own metrics for measure blurring and blocking). There are different ways for representing results: CVS-log file, video file with metric visualization. Also you could compare two (original, processed) or three (original, and two other processed by different codecs) files.

Proposed Work

AviSynth

AviSynth [8] is an AVI script engine, its aim is to provide

a better understanding of how AviSynth transforms script commands to actual video frames and help a user that has already grasped the basics of AviSynth scripting to start writing better and optimized scripts.

Sequence of events AVISynth

The sequence of events that occur when you execute (i.e. load and render to your favorite encoder). The sequence is conceptually divided in three major phases.

- Initialization phase.
- Script loading and parsing phase.
- The video frames serving phase.

The initialization phase:

During this phase the following events occur in order:

- An AVI stream object is created by the operating system, using the handler code provided by AviSynth.
- AviSynth dll is loaded and performs (among other initialization actions) auto-loading of the files that are placed in the AviSynth auto load folder.
- All AviSynth plugins (files with .dll extension).
- All AviSynth include scripts (files with .avi extension).

During auto-loading:

- The plugin and script functions are registered in the internal data structures of AviSynth; all plugins are unloaded after this phase. Only if a function is actually used inside the script, the plugin is loaded again.
- AviSynth include scripts are parsed (executed), as if they were all included in the top of the script source code with Import statements.

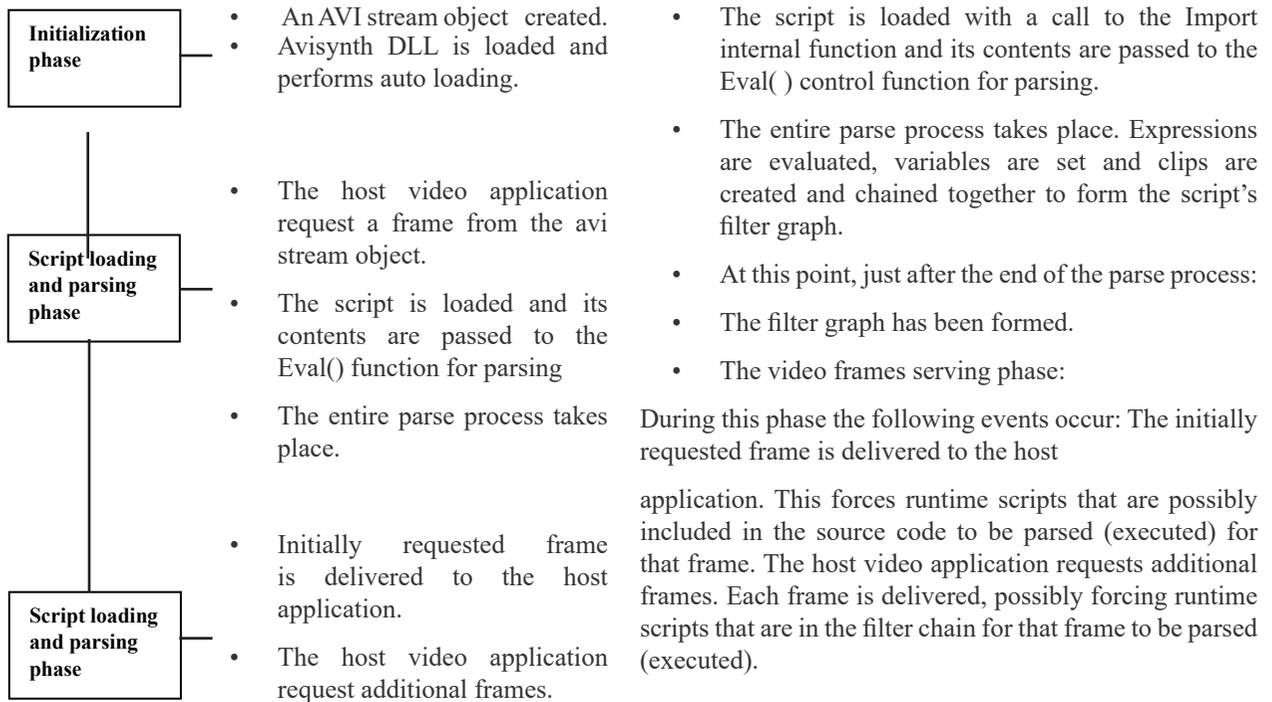


Figure: 2 the script execution model, Sequence of events

The script loading and parsing phase:

During this phase the following events occur:

- The host video application (the editor or the encoder) requests a frame from the AVI stream object (usually frame 0, but you should not count on this been always true).

Results And Conclusions

File size comparison:

The following table describes the collected video samples and the original size of the video. When the Video was encoded the file size of baseline and advanced profile after compression is displayed in table 1

Table 1. Final File size Video Samples for both Baseline and advanced H.264 Profiles.			
Video Sample	Original Size	baseline Profile	Advanced Profile
Interior	3409.92	285	225
Boat	1587.20	319	278
Grainy	2027.52	178	152
Whitesnow	3041.28	306	239
Legbot	374.00	28.4	28.7

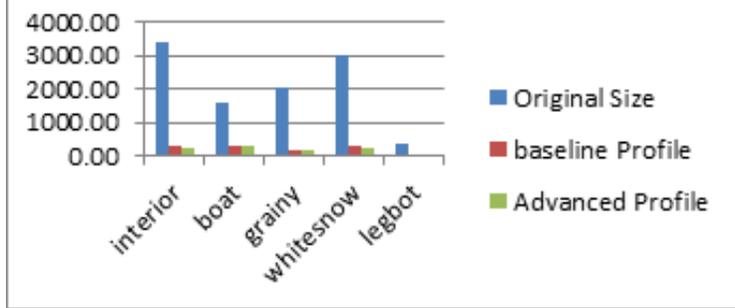


Figure: 3. Resultant File Size Comparison H.264 baseline and Advanced profile.

Average psnr comparision:

To calculate average PSNR for a sequence is to calculate average MSE(Mean Square Error) for all frames (average MSE is arithmetic mean of the MSE

values for frames) and after that to calculate PSNR using ordinary equation for PSNR:

Video Sample	baseline Profile	Advanced Profile
Interior	40.013	40.094
Boat	42.385	42.702
Grainy	44.198	44.738
Whitesnow	40.806	41.181
Legbot	51.213	51.07

The following table describes the average PSNR for the collected video samples. The PSNR should be in between 40-50db for a good quality video [10] and it

is achieved for both baseline and advanced profile after compression as shown in table 2.

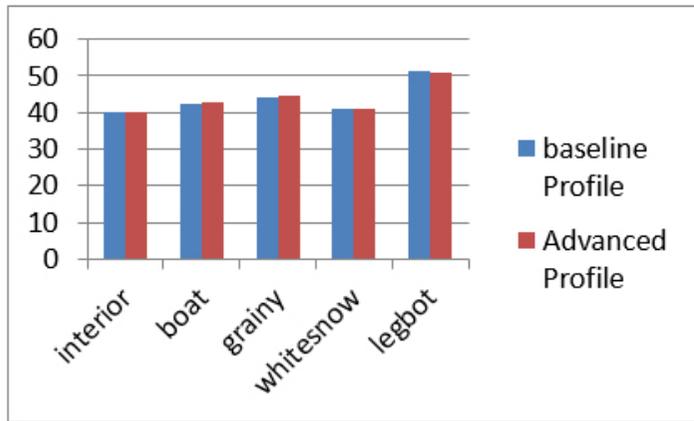


Figure: 4 Average PSNR rate for video samples, advanced profile have better PSNR than baseline

Ssim Comparison:

SSIM Index is based on measuring of three components (luminance similarity, contrast similarity

and structural similarity) and combining them into result value.

Video Sample	baseline Profile	Advanced Profile
Interior	0.9738	0.9756
Boat	0.9701	0.9725
Grainy	0.9708	0.9753
0Whitesnow	0.9743	0.9776
Legbot	0.9969	0.9968

In Video Encoding, Higher the SSIM ratio higher the perceived video quality of the Encoded video. It is obvious from table 3 that H.264 provides almost equivalent

video structural similarity for the already compressed video up to 97% for both baseline and advanced profile.

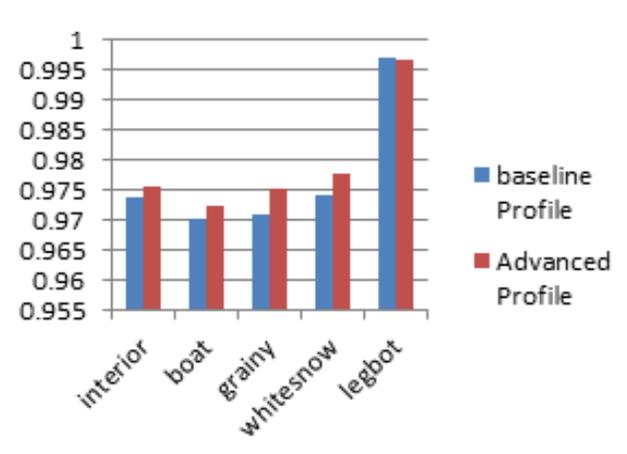


Figure: 5 SSIM rate for sample video, both baseline and advanced profile achieve quality level structural similarity but advanced is better than baseline

Conclusion

The main task of the comparison was to analyze different H.264 encoders for the task of trans-coding video like compressing video for personal and commercial use. The H.264 codec produces excellent video output achieving less than 1/3 of original file size without reducing video quality in any sense over both baseline and advanced profiles.

H.264 provides gains in compression efficiency of up to 50% over a wide range of bit rates and video resolutions compared to previous standards. Hence H.264 has proven to be successful in compressing already encoded media providing more than 97% of perceived Quality (SSIM). The PSNR profile of encoded media is around 40-46db, as PSNR in the range of 40-50 is considered to be of high quality (least noisy)

and structural similarity) and combining them into result value.

Future Perspective

- H.264 are still a new research area, there exists many Open problems including development of one single platform for decoding and encoding. Of all the problems mainly are:
- Studying Other Major profiles under H.264
- Implementing custom H.64 profiling environment.
- Understanding the correlations between RDO and B-Frames in H.264.
- Profiling H.264 over other video codec matrices such as Precise-PSNR, A-PSNR, ST-SSIM, MSSIM, VQM.
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Blended Learning: An Amalgamation of Virtual World and Conventional Classrooms

Shubhangi Garg* Peeyush Srivastav**

Abstract:

Education and technology are interrelated in today's scenario. Today's NET generation feels pretty comfortable with online education, doing research on the internet, resorting to instructional videos on you-tube and distance learning powered by video technology. Past years have witnessed the birth of a new paradigm for learning environment. On one hand, traditional teaching is concerned with the teacher being the controller of the learning environment, who plays the role of instructor and decision maker. Information and Communication Technology based learning environment, on the other hand, is where we find any combination of distance and face-to-face interaction that acts as online simulated environment to unleash the potential of virtual world.

This paper discusses the opportunities and challenges of teaching-learning approaches, emphasizing those that combine traditional and virtual learning environments. This has been supported by analysing the data collected from students and teachers of hospitality sector. The content of various articles published in the leading research journals was analysed and used in the study to record the revolutionary changes in the education field. Its outcome will be useful to gain a profound understanding of the strategies in the context of imparting education, as well as provide researchers with some suggestions for future research agendas.

Keywords: Education; Virtual world; Traditional teaching; ICT.

Introduction

As education enters a new phase in every few years, teachers are challenged regularly to keep up with the changes that are surfacing at a greater-than-ever rate. Age old learning theories and principles used for imparting education are being made to accommodate to novel and faster means of information delivery, utilizing technology more often. The present time requires learners to have knowledge along with effective and efficient skills, to be a part of the strenuous competition. The ever increasing need for new ways of providing education over the time has lead to dramatic changes in technology and organization of teaching-learning process.

The society we live in is moving towards electronic communication rapidly. It is necessary for students and teachers in a similar way to become aware and practise the theory of practical communication.

Academicians need to acquire knowledge and develop new skills to become creators of upmarket teaching materials and better facilitators.

The necessity for the learners to be physically present in the classroom, during the educational process of the traditional face-to-face educational system manifests serious disadvantages. The truth is, not all students can fulfill the condition of physical presence in the classroom for various reasons. Therefore, they do not benefit from the system.

Virtual classrooms, on the other hand, are quite different from conventional classrooms. They are away from the 'custom' of having one teacher for a group of students, all in one place at the same time. In such classroom, learners may be at different locations from their teacher or peers in their class.

Virtual world's history dates back to 1978, with the

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creation of the online text-based Multi-User-Dungeon game MUD. Virtual worlds offer a new stance to 'distance learning' with a personal and pleasing experience to meet the needs of the digital natives, inhabiting higher education campuses today. In the recent time, virtual reality can be accessed on both- large virtual displays or a desktop system. The outcome is that virtual reality permits users to have a 'physical' interaction with the virtual creation and this in turn progresses to more communication between various spheres.

Virtual Worlds are budding as an optional means of communicating, collaborating and organizing, thus changing education patterns. Also it gives a lot of opportunities for group work and peer teaching, in turn fostering social integration. The ability to introduce practical knowledge to the virtual classroom without actually leaving it makes educational experience invaluable. Motivation and engagement are key factors of virtual learning.

Need of the hour is "tailored learning" in the form of ICT based learning environment where we find the combination of distance and face-to-face interaction along with an immersive experience. A combination of learning media and learning environment, which reinforces and accelerates mastery and application on the job, has emerged as 'Blended learning', the-much-called-for concept.

Bielawski & Metcalf (2003) opinionated blended learning as a mix of instructor-led and technology-based learning. E-learning, webinars, classroom, role plays, coaching and hands on virtual experience are a few techniques that may be incorporated in the blended teaching-learning process to attain peak performance. Blended learning is apt to students with different needs and learning styles. The major benefits of blended learning for learners and educators may be cited as:

1. Improves student engagement and motivation.
2. Potential to extend the reach of effective teachers.
3. Better preparedness of teachers.
4. Better interaction with students.
5. Better fostering of ideas and discussion.

6. Better feedback for teaching fraternity.

In Blended learning, several learning approaches are pooled together. This makes a mix of computer assisted learning, like virtual reality systems with traditional learning methods. The best blended learning model is one which integrates a wide range of functions, empowering learners to exercise more control while participating in several learning activities.

More number of conventional universities and training centers encourage such forms of learning as educational institutions see this as an opportunity to widen access to their courses, in an attempt to reach new market potential.

Statement of Purpose

The purpose of this exploratory study is to:

1. Examine the role of conventional and virtual classrooms on education and training.
2. Emphasize upon the need to weave conventional and virtual learning experiences through blended learning.
3. Evaluate the need of the digital generation with reference to classroom learning.

Identified subject matter will definitely help in molding the curriculum and classrooms to provide enriching experiences to the students of hospitality sector this year and for years to come.

Methodology

This paper is a pilot study that employed a convenience sampling method, while obtaining the primary data through 39 self administered web questionnaires. The use of qualitative data (focus group, in terms of teachers) and the survey (questionnaire, for students) make the findings credible. The questionnaires comprised of three parts: the first 3 questions to know the demographic profile, the next 6 close ended questions administered their need for various learning techniques and the last 10 questions were based on likert-scale, to map their understanding of conventional and virtual classrooms.

For the study, a number of issues are discussed regarding

curriculum design, learners and trainer's knowledge needs, teaching methods and learning experiences in hospitality and tourism educational institutions. This was undertaken through a variety of approaches including formal literature searches, stated requests for help on various hospitality and tourism e-networks, direct contact with related hospitality training and educational institutions and communication with individuals and companies with a known interest in the area.

The paper follows the same direction as previous research works, by aiming to understand the increasing importance of blended learning in hospitality and tourism education, as well as, how it has started receiving most attention over the past few years. A wide range of issues related to teaching practices, curriculum, theory and practical work integrated learning, diversity of tourism and hospitality education experiences in both conventional and virtual classrooms have already been addressed in same form or other, in the existing research articles published in academic and industry journals.

The present study provides more up-to-date insights by examining articles published in the leading tourism and hospitality research journals. The content was analyzed and used in the study to offer insights into the need for transformation of learning experiences in hospitality and tourism education, through effective teaching strategy, to facilitate students in establishing themselves in the competent world.

Literature Review

In recent years, the knowledge based economy has exhibited a pervasive and ever increasing demand for innovative ways of delivering education, which has led to dramatic changes in learning technologies and organizations. "The world of reality has its limits; the world of imagination is boundless", said Jean Jacques Rousseau, speaking in the 18th century.

A research study conducted by the Virtual Human Interaction Lab at Stanford University, "The effects of fully immersive virtual reality on the learning of physical tasks", highlights the positive impacts that virtual reality can have on technical training. The traditional teaching approaches are generally teacher-directed and follow cookbook steps of activities and demonstrations. This approach may not provide students with valuable skills or

even with a body of knowledge that lasts much beyond the end of term. (Morris & Harris, 2002)

Today's educators are facing new challenges not experienced by teachers in the past. They are dealing with students who are part of a 'net generation' (Oblinger, 2003), brought up in a 3D world of virtual communication, visual complexity and online identities. They want and expect more engaging, empowering and interactive learning experiences in their student life than universities are normally able to give them. (Penfold)

Virtual reality can bring simulation based learning environments closer to real life experience. Rather than watch the simulated world through a desktop window, students are immersed in a 3D computer simulation of their work environment, where they can improve their skills through practice on realistic tasks. Simulations, games and role plays in a virtual world can engage students in their own learning (Armstrong, 2003) and encourage learning by doing (Schank, 1997). Students engaged in virtual worlds can be interpreting, analyzing, discovering, evaluating, acting and problem solving – often learning without knowing they are learning! (Penfold)

Bringing cutting-edge technology through an innovative virtual community is the need of the hour. Through the virtual environment, one can easily access valuable tools in one place from anywhere in the world including:

1. All program curriculum materials that complement the programs hands-on training.
2. Chat feature which promotes discussion and networking between participants around the world.
3. Webcasts and networking opportunities with senior leaders of the field.

(The Voyage Global Leadership Development Program)

Computer mediated conferencing format requires a much broader range of expertise; from computer skills to inter and intra personal communication. (Salmon, 2000)

Moderating an online discussion for learning is a very complicated task. More so than in face to face courses, the 'teacher', 'moderator' or 'facilitator' must work to see that instructional objectives are met, while providing a friendly

environment in which to work. It becomes the moderator's goal to not only evaluate content for clarity and subject matter, but he or she must also be aware of the need for learners to build concepts by working together. (Collins & Berger, 1997)

Studies show that a virtual environment can "stimulate learning and comprehension" because it provides a tight coupling between symbolic and experiential information. (Bowman, 1998)

An investigation of the altitude of education students towards virtual reality as a tool in the educational process and towards virtual learning environment on specific disciplines found students had a favourable attitude towards virtual reality in educational process. (Mikropoulos, 1998)

The primary features of a virtual environment:

1. Involvement– Hard and software that combine to give some sense of inclusion or presence in the virtual environment.
2. Interactivity–The computer generated environment responds in real time to the movements and actions of the user.
3. Internal Logic- The computer generated environment has its own physics, its own moral and social order, which may correspond more or less closely with those of the real world.

(Cromby, Standen, & Brown, 1996)

Experience, repetition and interaction are important processes in practical training. Virtual reality provides this in a controlled and programmable environment. (Using virtual reality in technical training)

Dickey (2005) reviewed two distance learning projects using virtual worlds and concluded that virtual worlds offered "collaboration, community and experiential learning" and allowed learners to become "situated and embodied" within the learning environments as

1. Virtual Field trips,
2. Role play exercises

3. Lecture and demo
4. Guest room design
5. Kitchen layout and operation; (Penfold)

VLEs will provide opportunities to improve the quality and variety of teaching and learning that are not being achieved using current methods. (Barajas, 1998-2000). VLEs will reduce the administrative burden on teachers to be able to give more time to individual student's educational needs. (Barajas, 1998-2000). The implementation of VLEs will not succeed without an equal, integrated and coordinated investment in: infrastructure, training and development and organizational culture; supporting the development of "innovation units."

Blended Learning brings traditional physical classes with elements of virtual education together. (Finn, 2004) (Akkoyunlu). It mixes various event-based activities, including face-to-face classrooms, live e-learning and self paced learning. Blended learning is referred to as distributed, hybrid, flexible or multimodal learning. (Duhaney, Gibson, & Kakkar, 2004; 2006; 2008) (Monika).

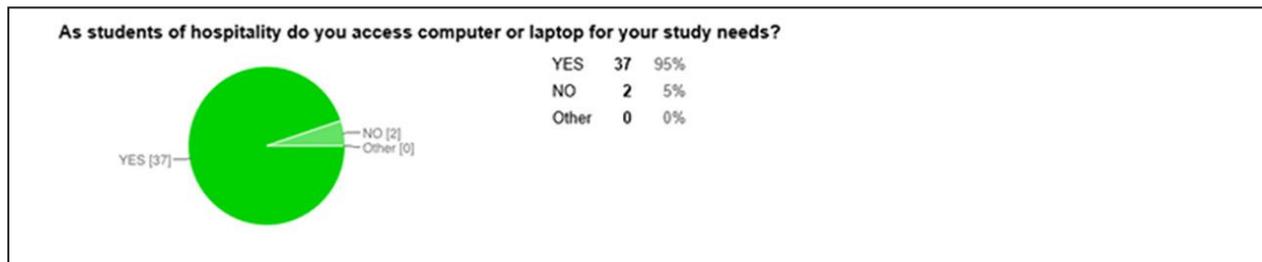
Simply put, (Singh, 2001) defined blended learning as a learning program where more than one delivery mode is being used with the objective of optimizing the learning outcome and cost of program delivery. (Akkoyunlu). Blended learning appears to provide strong support for instructors looking to create learning settings based on strong learner-centred modes of delivery. (Oliver, 2006) (Monika).

(Osguthorpe, 2003) The author stated that instructional objectives, many different personal learning styles and learning experiences, the condition of online resources and the experience of trainers play an important role in designing an effective blended learning environment and to establish equilibrium between face-to-face and e-learning environment.

Data Analysis and Findings

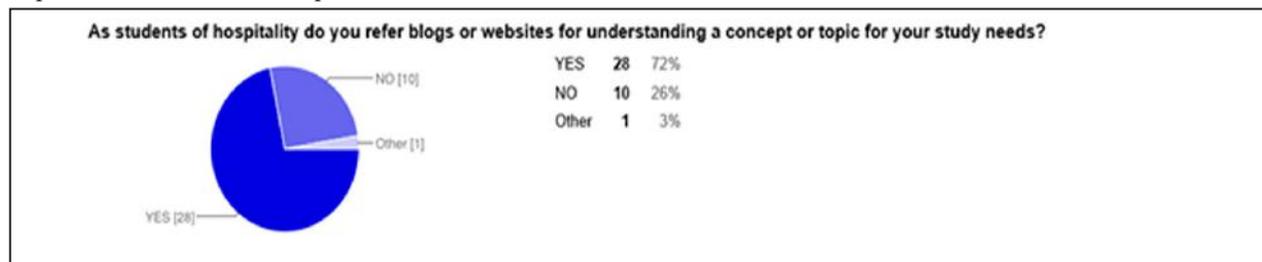
This paper attempts to put together some of the key points on tailoring the educational processes and apply them, with a particular emphasis on the Hospitality and Tourism

field. It also demonstrates that the discussed concepts have good explanatory value for looking at educational stipulation.



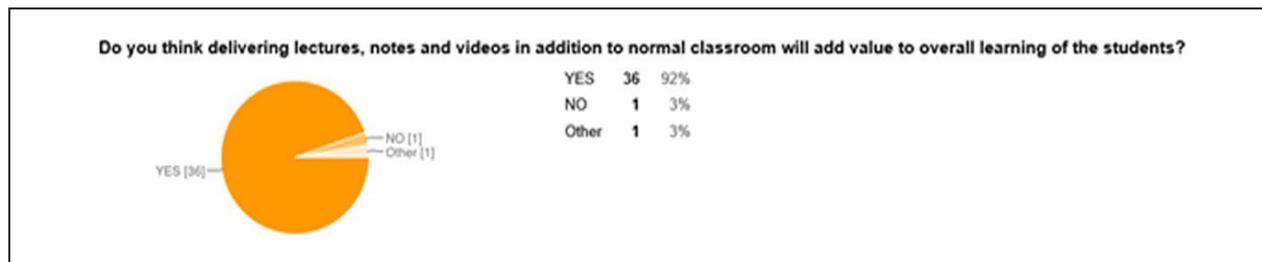
As interpreted from the result, respondents feel that virtual environment makes learning more easy and accessible. Students are looking for diversity in learning as 95% respondents access their computers

or laptops for study needs, besides classroom learning, indicating that blended learning is the need of the hour.



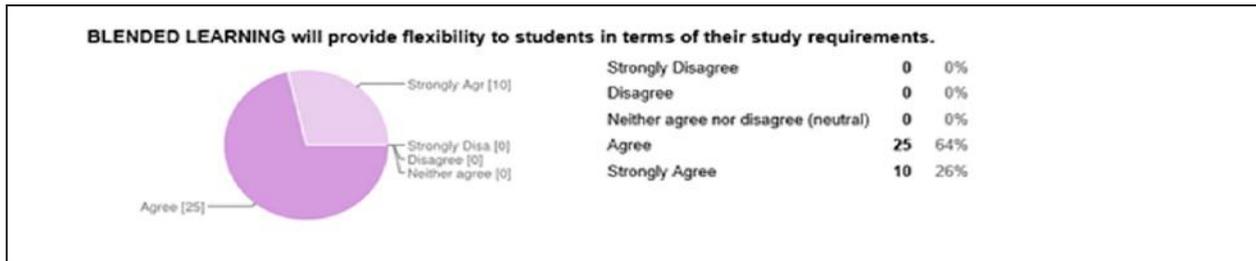
Surprisingly, more than 70% students refer blogs or websites for understanding a topic. This is a clear indicator for all facilitators- the need to learn

develop and maintain blogs to impart education in addition to their class and lecture notes.

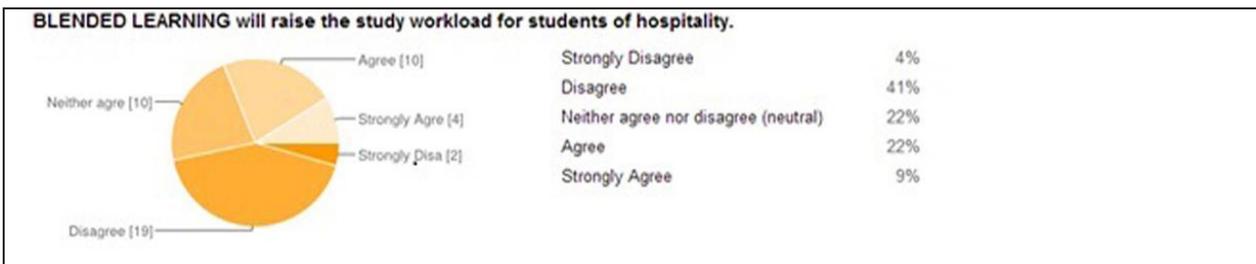


To further our claim, the study highlighted that delivering online lectures, videos or notes add value to the overall education of students; while Blended

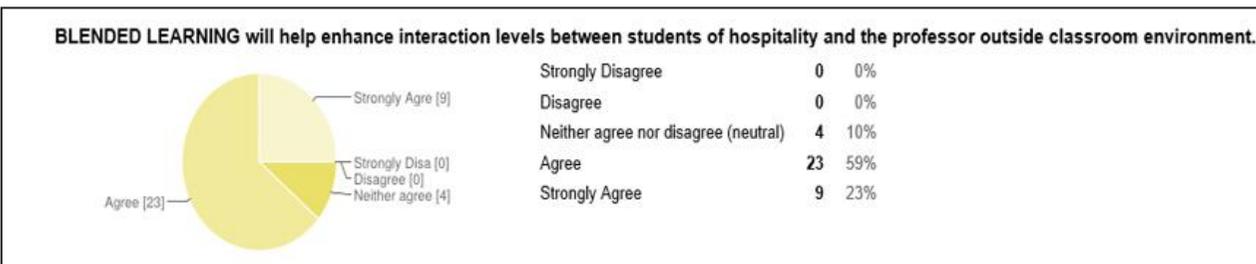
Learning, is still the preferential mode of students, to understand and learn better by exploration and hands on approach through active engagement.



Self paced learning with time and location flexibility in a classroom environment was appreciated by more than 60% respondents. It was noted that the blended learning was found to be encouraging and motivating among most students.



Contrary to popular belief that the students might be burdened more in blended environment than in a traditional teaching environment, around 40% percent of the respondents strongly disagree with the fact whereas around 20% agree to it.



Respondents felt that blended learning facilitates more accessibility to students for interacting with professors after college hours that will reinforce better interaction levels between the two



Perhaps the most noteworthy finding from this study was that educators need to adopt a wide range of learning and teaching strategies to cater for learner’s different abilities and learning styles, and maintain a balanced stress on knowledge acquisition and the development of skills and positive values and attitudes, so as to enhance student’s capability for lifelong learning. Tremendous changes are taking place in hospitality industry which poses several challenges for transformation of the whole educational process including educational curricula, learning materials, instructional practices and education stakeholders. In addition to traditional classroom based learning, much learning can also happen virtually, if

not through 'physical / real' hands on experience or field trips. This type of development activity is often the most valuable part of learning experience.

At higher level of education, virtual reality holds the possibility of making a difference by leading learners to new discoveries, motivating, encouraging and exciting them with the experiences it provides. The learner can participate in the learning environment with a sense of presence.

Scope of Study

All education stakeholders including the educators, learners and industry, would benefit from further refinement of the concept of blended learning. The research suggests that both the conventional and virtual classrooms need to be amalgamated for engaging today's learners and shape them as well educated (knowledgeable and skilled) ambitious graduates. Education systems and institutions must take the challenges of the knowledge economy seriously.

Limitations

Existing data does not depict the possible impact of blended learning in terms of industry benefit. Moreover, different universities and affiliating bodies have unlike norms which results in divergent parameters in curriculum content scheming. Also, this paper does not take into account the interference of other political, social and technological factors which otherwise may have an effect on the teaching-learning process. Results and conclusions from this research must be treated with caution so as to avoid bias towards the mentioned subjects, since other dimensions of the broad field could not be covered due to limitation of time.

Conclusion

The phenomena of blended learning will ensure new forms of teaching and learning in an organized manner. It should be incorporated keeping in mind the flexible principles of imparting education and training. There are emerging trends that show that most of the traditional learning organizations are taking advantage of the new ICT systems (virtual) to impart training. It is transforming all organizations in a manner never seen before.

Recommendations

A trans-disciplinary approach in pedagogical design and development of 'virtual' learning experiences.

A very important tool that helps execute blended learning is a learning management system, a collection of online software applications to deliver teaching and learning in either a distance education or an on-campus mode, effectively.

Teachers should strive to implement blended learning to engage the students in the learning process.

Faculties, tutors and facilitators should be encouraged to develop more engaging frameworks for students during classroom discussion and debates.

Inclusion of different learning media, to motivate students be an active member of the class, should be done more frequently.

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Competitive Analysis for Travel Tourism Industry

Soumyamoy Maitra*

Abstract:

According to World Travel and Tourism Council, India will be a tourism hot-spot from 2009 to 2018 having the highest 10-year growth potential. The Travel & Tourism Competitiveness Report 2007 ranked tourism in India sixth in terms of price competitiveness and 39th in terms of safety and security. Despite short- and medium-term setbacks, such as shortage of hotel rooms, tourism revenues are expected to surge by 42% from 2007 to 2017. India's rich history and its cultural and geographical diversity make its international tourism appeal large and diverse. It presents heritage and cultural tourism along with medical, business and sports tourism. India has one of the largest and fastest growing medical tourism sectors.

Keywords: price competitiveness, ITDC, ATT, ARMS, FTA

Introduction

Tourism in India is the largest service industry, with a contribution of 6.23% to the national GDP and 8.78% of the total employment in India. In 2010, total Foreign Tourist Arrivals (FTA) in India were 5.78 million and India generated about 200 billion US dollars in 2008 and that is expected to increase to US\$375.5 billion by 2018 at a 9.4% annual growth rate. The majority of foreign tourists come from USA and UK. Kerala, Tamil Nadu, Delhi, Uttar Pradesh and Rajasthan are the top five states to receive inbound tourists. Domestic tourism in the same year was 740 million. Andhra Pradesh, Uttar Pradesh, Tamil Nadu and Maharashtra received the big share of these visitors. Ministry of Tourism is the nodal agency to formulate national policies and programmes for the development and promotion of tourism. In the process, the Ministry consults and collaborates with other stakeholders in the sector including various Central Ministries/agencies, the state governments and union territories and the representatives of the private sector. Concerted efforts are being made to promote new forms of tourism such as rural, cruise, medical and eco-tourism. The Ministry of Tourism also maintains the Incredible India campaign.

Government Initiation

The organizations involved in the development of tourism

at the Centre are Ministry of Tourism, Indian Institute of Tourism and Travel Management, National

Council for Hotel Management and Catering Technology, India Tourism Development Corporation Limited, Indian Institute of Skiing and Mountaineering and National Institute of Water Sports. The Ministry of Tourism is responsible for formulation and implementation of policies and programmes for the development of tourism within the country and for attracting foreign tourists to India by way of developing tourism infrastructure, publicity and promotion, dissemination of information, co-ordination and supervision of activities of various segments of industry such as hotels, travel agencies, tour operators, etc.

There are 20 field offices of the Ministry of Tourism in India and 13 in other countries to undertake both developmental and promotional activities. While the overseas offices are in constant contact with tourists, travel intermediaries and media to promote tourism in India, the field offices in India provide facilitation services to tourists and co-ordinate with the State Governments on tourism infrastructural development. The main objectives of the overseas tourist offices are to position India in the tourism generating markets as a preferred tourism destination, to promote various Indian tourism products vis-a-vis competition faced from various destinations and to increase India's share of the global tourism market. These objectives are met

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through an integrated marketing strategy and synergized promotional activities undertaken in association with the Travel Trade and State Governments.

India Tourism Development Corporation Development Limited

India Tourism Development Corporation (ITDC) came into existence in October 1966 with the objective of developing and expanding tourism infrastructure in the country and thereby promoting India as a tourist destination. Working on the philosophy of public sector, ITDC succeeded in achieving its objectives by promoting the largest hotel chain in India and providing all tourist services, i.e. accommodation, catering, transport, in-house travel agency, duty free shopping, entertainment, publicity, consultancy, etc., under a single window. It also offers consultancy services from concept to commissioning in the tourism field both for private as well as public sector.

In pursuance of the disinvestment policy of the Government, 18 hotels have been disinvested. Keeping in view the changed scenario, the Corporation has suitably been restructured so that it continues to fulfill its original mandate for tourism development in the country. Besides consolidating and expanding its existing business areas, ITDC has made diversification into new avenues/innovative services like full-fledged money changer services and Western Union Money Transfer, Training Consultancy in hospitality sector, event management and consultancy and execution of tourism and engineering projects. India Tourism Development Corporation (ITDC) came into existence in October 1966 with the objective of developing and expanding tourism infrastructure in the country and thereby promoting India as a tourist destination. Working on the philosophy of public sector, ITDC succeeded in achieving its objectives by promoting the largest hotel chain in India and providing all tourist services, i.e. Accommodation, Catering, Transport, in-house Travel Agency, Duty Free Shopping, Entertainment, Publicity, Consultancy, etc., under a single window. It also offers consultancy services from concept to commissioning in the tourism field both for private as well as public sector.

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Besides consolidating and expanding its existing business areas, ITDC has made diversification into new avenues/innovative services like full-fledged Money Changer Services and Western Union Money Transfer, Training Consultancy in hospitality sector, event management and consultancy and execution of tourism and engineering projects.

ITDC has been a pioneering tourism organization which provides all the tourist services/facilities under one roof. ITDC's present network consists of 8 Ashok Group Hotels, 7 Joint Venture Hotels including one under construction, two Restaurants (including one Airport Restaurant), 13 Transport Units, 1 Tourist Service Station, 37 Duty Free Shops at International as well as Domestic Custom Airports, 1 Tax Free outlet, 1 Sound & Light Show and 4 Catering Outlets. Besides, ITDC is also managing a Hotel at Bharatpur and a Tourist Complex at Kosi and a SEL show at Sabarmati, Ahmadabad owned by the Department of Tourism. The Ashok International Trade Division of ITDC offers world class duty free shopping facilities to international travelers at its 38 outlets, earning crucial foreign exchange for the country and showcasing Indian products to the world. The Ashok Travels and Tours (ATT) handles work relating to Domestic/International ticketing, hotel booking and tour packages, car & coach rentals, money changing services, money transfer services, overseas insurance and organizing exhibitions.

The Ashok Reservation and Marketing Services (ARMS) Division of ITDC, which is mainly responsible for marketing of Ashok Group of Hotels, participated in national/international events like ITB Berlin to ensure direct interaction with Foreign Tour Operators to promote various services of ITDC.

The Ashok Institute of Hospitality & Tourism Management (AIH&TM) of ITDC has been associated with the pioneering efforts in human resource development for more than three decades. Awarded the ISO-9001-2000 Certification, the institute conducts 18 months Craft/Certificate courses in the field of Culinary Skill Development, besides providing training to management trainees/apprentices and organizing Executive Development programmes for the officials of ITDC. Under an MOU signed with the prestigious Kurukshetra University, the AIH&TM started 4-year Bachelor's Degree Course in International Hospitality Business Management from August 2004.

Hotel Management and Food Craft Institutes

The Ministry of Tourism has accorded high priority to the development of manpower to meet the growing needs of Hotels, Restaurants and other Hospitality-based Industries. For this purpose, 21 Institutes of Hotel Management and Catering Technology and 10 Food Craft Institutes (3 of these are now also State IHMS) have been set up in the country. In addition to the above, four more Institutes of Hotel Management are in the pipeline at Uttarakhand (Dehradun), Jharkhand (Jamshedpur), Chhattisgarh (Raipur) and Haryana (Kurukshetra). These Institutes conduct Degree courses in the field of Hotel Management, Catering Technology and Applied Nutrition and Craft Courses in Food and Beverage Services, Accommodation Operations, Dietetics and Hospital Food Service, Food Production and Patisserie, House Keeping, Front Office, etc. IHM's Mumbai, Bangalore and Pusa (New Delhi) have started 2 Years M.Sc Hospitality courses also. Food Craft Institutes conduct Craft Courses for duration ranging from six months to one year for operational staff. All these training Institutes are affiliated to the National Council for Hotel Management Catering Technology and Applied Nutrition (NCHMCT) at apex level which regulates academics for all these Institutes.

Capacity Building for Service Providers (CBSP)

In the year 2002, the Ministry launched a programme called CBSP to train the persons engaged in small hotels, dhabas, eating joints, restaurants, etc., and also handling tourists like Immigration staff, airport staff, security/Police personnel, guides, taxi operators, bus drivers, etc. The objective was to provide short term training to improve their etiquette, behaviour and attitude towards tourists. The scope of this scheme has been further enlarged and the training programmes of 3/6 months duration have been added for skill development of existing as well as fresh service providers. Under this scheme, a new programme called 'Project Priyadarshini' was also launched in 2005 aimed at imparting training to women in taxi driving/operation, entrepreneurship like setting up souvenir kiosks, etc, to adopt tourism as their profession.

Hotel Accommodation

The hotel sector forms one of the most important segments of the tourism industry with high potential for employment generation and foreign exchange earnings. To give impetus

to this sector, the government provides concessions under EXIM Policy and other incentives. The Industrial Policy has now placed hotels and tourism related activities as a priority industry. Foreign investment and collaborations are now facilitated under the new economic policy. Automatic approval is available for foreign direct investment upto 100 per cent in Hotel and Tourism sector.

Travel Trade

The Department of Tourism has a scheme of approving Travel Agents, Tour Operators, Adventure Tour Operators and Tourist Transport Operators. During 2005, keeping in view the spurt in Domestic Tourism, a new category for the recognition of Domestic Tour Operators has been introduced. The aims and objectives of this scheme are to encourage quality, standard and service in these categories so as to promote tourism in India. The Travel Trade Division also interacts with the travel trade associations like Travel Agents Association of India (TAAI), Indian Association of Tour Operators (IATO), Indian Tourist Transport Operators Associations (ITTA), etc., and other agencies like India Convention Promotion Bureau, Pacific Asia Travel Association (PATA), etc. The Travel Trade Division also deals with all matters pertaining to the regulation and training of tourist guides at Regional level and also co-ordinates with other Ministries such as Civil Aviation, Culture, Railways, Surface Transport, External Affairs and Home Affairs on various issues to improve the facilities for the tourists visiting various destinations in India.

Celebration of Various Tourism Events

A number of events and road shows have been organised during 2005-06 for spreading awareness about India Tourism in domestic and international tourism market to attract more tourists to India. The major events organised by the Ministry in collaboration with various State Tourism Departments are: Golf open tournament, Srinagar; Sindhu Darshan at Leh; Heritage Festival, New Delhi; All India Crafts Mela, Hyderabad; Heritage International Festival, Jaipur; India International Boat Show, Kochi; Paragliding Show and Tourism Conclave in Himachal Pradesh; Mega Folk Festival "Virasat" in Dehradun; Prithivi 05-Global Eco-Meet, Kochi; Domestic and International Photo Exhibition "A Confluence of Cultures" and Essay and Photographic competition on "What Tourism Means To Me" on World Tourism Day on 27 September (every

year); India National Tourism Day on 17 March 2006; Designer's Night Bazar, Surajkund Crafts Mela, Haryana; 3 Global Interline Golf Championship, Photo Exhibition, Eco-Tourism Marketing Meet; Mussorie (Uttarakhand), WTTC, Himalayan Run and Trek and Photo Exhibition on Hindu, Buddhist and Islamic monuments of Kashmir. The Ministry of Tourism also participated in various travel and tourism events, trade fairs and exhibitions in India and abroad. The important fairs and exhibitions are Tourism Travel Fair in New Delhi, Mumbai, Bangaluru, Chennai and SATTE (South Asia Tourism and Travel Expo), New Delhi. India Tourism offices located in 20 cities in India also participated at local important fairs. The Ministry of Tourism participated in several overseas travel and tourism trade fairs, notably World Travel Market, London; ITB (International Tourism Bourse), Berlin; Arabian Travel Market (ATM), Dubai; EIBTM, Spain; IMEX, Frankfurt; Pata Travel Mart, Malaysia; FITUR, Spain; and World Travel Fair, Shanghai. India Tourism offices located in 13 overseas cities also participated in various travel and tourism fairs.

National Tourism Policy 2002

A National Tourism Policy-2002 was announced by the Government with, inter-alia attempts to position

India as a global brand to take advantage of the burgeoning global travel and trade and the vast untapped potential of India as a destination

Tourism in 10th Five Year Plan

In order to further accelerate the development of tourism in the country, the thrusts during the 10th Five Year Plan has been to:

- Position tourism as a major engine of economic growth
- Harness the direct and multiplier effects of tourism for employment generation and economic development
- Provide impetus to rural tourist
- Provide a major thrust to domestic tourism which will act as a spring board for growth and expansion of international tourism

- Acknowledge the critical role of private sector with government working as an active facilitator and catalyst
- Create and develop integrated tourism circuits based on India's unique civilization, heritage and culture in partnership with states, private sector and other agencies
- Ensure that the tourist to India gets physically invigorated, mentally rejuvenated, culturally enriched, spiritually elevated and "feels India within him".

Study Objective

"The World Travel & Tourism Council" aims to measure the factors and policies that make it attractive to develop the T&T sector in different States in India. These categories are : a. Safety & security b. Health & Hygiene c. Natural Resources d. Cultural Resources e. Tourism Infrastructure f. Easy Transportation/ communication g. Trained human Resources h. Price Competitiveness . According to the survey made by Indian govt. ; Andhra Pradesh (155.8 million) receives the highest share of the domestic tourists; where Uttar Pradesh (144.8 million) scores second, Tamil Nadu (111.6 million) scores third, Maharashtra (48.5 million) scores fourth, Karnataka (38.2 million) scores fifth as per as the share of the domestic tourists they receives in year of 2011; In this respect report also says that West Bengal stood 9th in this respect, this state receives 21.1 million domestic tourist in the year of 2011. Through this research researcher compares West Bengal with rest of the top 4 states regarding 8 factors which play an important to convert a state in to a Tourist hot spot.

Research Methodology

Research design:

The research design which I have used is Descriptive research design because; This research deals with a competitive study between West Bengal & other top 4 states which attracts most no. of Domestic tourists; after this research it will be understood How West Bengal emerges as a top tourist Destination

Data collection Methods

Secondary data: Journals, Articles, Books and Internet.

Primary Data:

- (a) Population: Individual tourists & Travel agencies; though individual tourists are divided in to 5 sub segments; like: A. People with less time for leisure are likely to take more frequent but shorter trips B. The experienced traveler wants authentic off the beaten track vacation in remote or less known places, leading to an interest in rural tourism C. The elderly population is the key in tourism generating markets has shown a preference for cultural tourism. D. Increasing interest in the spiritualism. E. Medical tourism
- (b) Sampling population: Taking Samples from the all 5 sub segments of individual tourists & mainly 3 travel agencies like A. Make my Trip B. Thomas cook C. Kundu Special
- (c) Sample Size: 100 persons
- (d) Sampling plan: Convenience & Judgmental sampling
Questionnaire development: A questionnaire was prepared consisting of 8 questions and 4 demographic questions.
- (e) Data collection: through personal interview and questionnaire data is collected.
- (f) Type of data analysis: ANOVA analysis
- (g) Scaling Techniques: In the research project, the non-comparative scaling technique is used. Among non-comparative scales, Likert scale is used
- (h) Scaling Techniques: In the research project, the non-comparative scaling technique is used. Among non-comparative scales, Likert scale is used.
- (i) Fieldwork: The field work of collecting data from respondents has been done through personal Interview and questionnaire from internet

Findings & Conclusions

Here 8 factors are taking in to the consideration for making

comparison between West Bengal & other top 4 states regarding attracting more numbers of Tourists in travel & Tourism Sector.

The First Factor is safety & security issues that is faced by the Tourists, here WB Scores very high even highest, UP score is lowest where other states like AP stood second , TN stood third & MH stood Fourth.

In Health & Hygiene Segment TN & AP score highest, Score of WB is lowest over here, where MH &UP both stood second with same score in this parameter

Third Segment is Transport facility that implies availability of public transport & Communication with in 7 outside of the state, in this same parameter AP, WB & MH score highest , where TN score is the lowest & UP stood second

In the natural resource or natural beauty parameter UP stood highest where AP, WB, MH stood second where TN score is lowest

In Cultural Resources Segment UP is the highest scorer, where AP stood second where TN & MH stood respectively third & fourth, the score of the WB is lowest over here

In Trained Human Resource segment MH scores Highest, WB score is the lowest, where AP & TN stood second & UP stood third

The next Segment is Price Competitiveness which means cost of the Tourist Package for visiting a particular state; in this Segment WB & MH score highest, that implies these two states are the cheapest place to visit; where UP & AP are the costliest place to visit

In environmental Sustainability segment MH stood first, UP & TN respectively stood Second & Third where WB score is Lowest

The last comparison among states is made on the basis of Tourism infrastructure parameter. This Tourism infrastructure further divided in to 4 sub segments; like availability of hotels, road condition in the state, marketing & Publicity for the state's tourism & maintenance of the tourist spots.

In hotel availability sub segment AP, TN & MH stood first, WB stood last ; In Road Condition sub segment TN stood

first ; In Marketing & Publicity parameter AP stood first & at last Maintenance of the Tourist spots Segment MH & AP scores highest where WB scores lowest

Marketing Recommendations

1. In order to ensure the continuing development of the tourism industry, collection of the accurate data on tourist arrivals, nationality, length of the stay, purpose of the visit, as well as feedback on the products, condition & experience is absolutely necessary.
2. Publicity & Marketing:
 - (a) Marketing of Tourism products will continue to be done through AD in Travel magazines, general magazine, news paper, & electronic media, Publication of leaflets, brochures, tourist maps, Participation in the exhibition, fairs 7 festivals, road shows, involving opinion makers like brand ambassadors, & state tourist office. In this case railways & airport authorities would be approached to carry ads of tourism destinations of the state as trains are running to & from the state or airport connected with the states.
 - (b) West Bengal state Tourism offices would be opened or strengthen at important tourist centers & other metropolitan cities for marketing of tourist products (Craft, Cuisine, art, cultural activities etc.) that would provide all the information regarding state's tourism to the prospects
 - (c) Tourism department will identify & communicate with important members of the travel trade network in the different market segment regularly through information materials
3. Tourism security :Tourists Sometimes face harassment from taxi drivers, hotel owners, shop keepers, vendors & other during their visits to various destinations; So Govt. of west Bengal with the help of local authorities exercise close supervision over the activities of the service providers at the different gateways by setting up tourist help desk
4. Building trained Human Resource: The demand of

manpower in hotel & restaurants, maintenance of the tourist spots, sightseeing, transportation etc have been far exceeding the supply. This industry needs the professionally qualified & trained personnel at all levels to meet the demand. Govt. Of West Bengal as well as other private bodies are opening up new hotel management, catering courses, food craft, Travel & Tourism Management colleges

5. Tourism Services: In order to monitor the provision of such Services especially by Travel & Tour operators, tourist taxis & buses, tourism equipment providers, tourist guide, tourism consultancy etc should need registration of such agencies with the directorate of tourism would be encouraged.
6. Tourism Infrastructure: West Bengal Tourism Development Corporation Ltd. Will renovate, expand, upgrade or build new hotels, resorts, development of roads, Construction of public convenience to ensure sanitation, drinking water supply, solid waste disposal & Development of green spaces around tourist spots with the help of PPP model. The fund may come from private body or state budget plan or central assistance; coordination will be made with municipality or zillah parishad to ensure that there is convergence in the activities.
7. There is a need of developing a portfolio of tourism products by utilizing its unique nature based (Mountain, Sunder ban delta, world life, beaches, Tea plantation) cultural tourism (fair, festivals, heritage art & craft, film, cuisine, & village tourism) Religious Tourism(Visit to religious places) & Contemporary Tourism (Leisure, Amusement park, Medical tourism, Rail tourism, Shopping, Sport Tourism)

Methodological Limitations

- (a) Less time to complete the project.
- (b) Sample unit is taken from West Bengal only
- (c) Small sample size i.e. 100 only
- (d) Samples are taken from Make my Trip, Thomas cook & Kundu Special agencies only; other agencies are not considered for this project

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CSR in Indian Banks and Financial Institutions

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Abstract:

Social responsibility is a goal oriented concept to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere. Every business has a social responsibility which requires businessmen to consider whether their action is likely to promote the public good, to advance the basic beliefs of our society, to continue to its stability, strength and harmony. CSR is the deliberate inclusion of public interest into corporate decision-making, and the honoring of a triple bottom line (3BL): People, Planet & Profit t (3Ps). Commission of European Communities defines CSR as a concept "whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" The contribution of financial institutions including banks to sustainable development is paramount, considering the crucial role they play in financing the economic and developmental activities of the world. In this reference the present paper attempts to analyze the CSR practices in Indian banking sector.

Key Words: Sustainable, Corporate Social Responsibility, Financial Institutions, Banks.

Introduction

Corporate social responsibility (CSR) is increasingly becoming a major part of the business agenda for financial institutions (FIs). Financial service companies acknowledge that 'what's beneficial to society can profit the business.' In this white paper, our experts make a business case for CSR in financial services.

The beginning of 21st century in India has seen the term CSR coming to the forefront of development of discussion. In recent times, the Corporate Social Responsibility is emerging as a significant feature of business philosophy, reflecting the impact of business on society in the context of sustainable development. CSR not only includes corporate regulatory compliance, but also refers to the act of making business successful through balanced, voluntary approaches to environmental and social issues in a way that is helpful to the society. The present day economic growth and development in India mostly depends upon a well-knit financial system which comprises a set of sub systems of financial institutions, financial market financial instruments.

Both financial markets and financial institutions play a crucial role in the financial system by rendering various financial services to the Indian community. Social Responsibility of business refers to what a business does over and above the statutory requirement for the benefit of the society. The word "responsibility" emphasizes that the business has some moral obligations towards the society. CSR, also known as Sustainable Responsible Business (SRB), or Corporate Social Performance, is a form of corporate self-regulation integrated into a business model. Industrialization and commercialization of service sector have explored vivid avenues of progress to a nation but at the flip side it has rooted the use of non-renewable energy sources, global warming, greenhouse gas mission and rising levels of waste which have harmful effects to the generation coming next. The growing concerns for sustainable development, environmental performance, encompassing pollution control and management of natural resources has given mass recognition to the concept of Corporate Social Responsibility (CSR). In the financial sector several international initiatives like United Nations Environment Programme Finance Initiative, Global Reporting Initiative, Equator Principles and Collavecchio Declaration on Financial Institutions are underway to

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ensure the adoption of CSR practices in normal business operations.

CSR entails integration of social and environmental concerns by companies in their business operations as also in interactions with their stakeholders. The contribution of financial institutions including banks to sustainable development is paramount, considering the crucial role they play in financing the economic and developmental activities of the world. In this context, the urgency for banks to act as responsible corporate citizens in the society, especially in a developing country like India need to be hardly overemphasized. Their activities should reflect their concern for human rights and environment. Reserve Bank of India feels that, there is general lack of adequate awareness on the issue in India. In this context, the need for sustainable developmental efforts by financial institutions in India assumes urgency and banks, in particular, can help contribute to this effort by playing a meaningful role. RBI in its notification dated 20th December 2007 has advised banks to take note of the issues raised and consider using the same to put in place a suitable and appropriate plan of action towards helping the cause of sustainable development, with the approval of their Boards.

While development and welfare programmes in India address all the citizens focus is on the disadvantaged, marginalized and excluded. Marginalization in India is primarily on the basis of gender, disability, ethnicity and location. This leads to social, physical and financial exclusion of such groups. Engaging the marginalized in India is further complicated due to language and literacy variances, information asymmetry, infrastructure constraints and geographical challenges. CSR should ideally propose to target these excluded and marginalized groups.

Literature Review

This section provides a review of the theoretical literature on CSR activities in Indian banking sectors. Howard Bowen in 1953 argued that since social institutions shaped economic outcomes it was to be expected that business firms as an economic outcome of societal interests should consider the social impact of business activity. According to Bowen, "CSR refers to the obligations of businessmen to pursue those policies to make those decisions or to follow those lines of relations which are desirable in terms of the objectives and values of our society." Juholin

(2004) made a distinction between CSR as simple legal compliance and CSR as conducting business with a high regard for morality. Matten & Crane (2005) emphasized that the firms will experience divergent degrees of internal, external and lateral pressures to engage in CSR, as firms are embedded in different national business systems. World Business Council for Sustainable Development (2001) explained CSR as the commitment of business to contribute towards sustainable economic development, working with employees, their families and the local communities. Uhlaner et al (2004) discussed the economic, legal, ethical, philanthropic aspects in regards to CSR. According to Friedman (2006) "There is one and only one social responsibility of business- to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud". In contrast to Friedman's statement, Robbins and Coulter (2007) explained that the management's social responsibility goes beyond making profit to include protecting and improving social's welfare of its stakeholders and the environment in which the firm carries out its operations. (Carroll, 2008). Zain (2008) extending the Carroll's statement said that ethical standards play an important role in a firm's success in the long-run. Sharma (2011) made an attempt to analyze CSR practices and CSR reporting in India with special reference to banking sector and concluded that banking sector in India is showing interest in integrating sustainability into their business models but its CSR reporting practices are far from satisfaction. Recently, CSR has gained much attention in the corporate world. As explained by Hertz (2012), earlier it was a form of capitalism that put much more emphasis on what we owned, on whether we had a Gucci handbag for example, than on things like the quality of our environment, the quality of the air we breathe, the kind of healthcare we have, what makes us content and happy. She called it Gucci capitalism and predicted that the gradual demise of Gucci capitalism will be followed by a new era of responsible capitalism called Co-opt capitalism. In short during this phase the concept of CSR was showered with some divergent thoughts covering economic, legal, ethical, philanthropic and social aspects of business houses.

Recognizing the importance of CSR, the Ministry of Corporate Affairs, Government of India, has recently (2009) brought out a set of voluntary guidelines on CSR for corporate sector. These CSR guidelines pertain to areas,

such as, care for all stakeholders, ethical functioning, respect for workers' rights and welfare, respect for human rights, environment and social and inclusive development.

While studying the current state of CSR in India, Cheung et al. (2009) commented that India's economic reform and its rise to become an emerging market and global player has not resulted into substantial changes in its CSR approach. Contrary to various expectations that India would adopt the global CSR standards, its present CSR approach still largely retains its own characteristics adopting only some aspects of global mainstream of CSR. Keeping parity with the situation Govt of India also constituted committees and subcommittees, study groups to study the status of CSR and issued several recommendations, directions and guidelines for the implementation of CSR strategies.

A survey was conducted by Business Community Foundation for TERI (Tata Energy and Research Institute) Europe during the year 200102 and reported that a large portion of giant companies were engaged in CSR activities. Some of the major findings of the study includes (i) Serious and committed approach to CSR is increasing its reach, but there is vast ground yet to be covered, (ii) Collaboration work between companies & NGOs is increasing, (iii) Corporate are realizing that Good for business is good business, and (iv) Most interventions so far philanthropic in nature, rather than strategic. Another Survey was conducted jointly by Confederation of Indian Industry (CII), UNDP, British Council and Price Water & House Coopers (PWC) in 2002, which reported that all most all the companies under the study recognize the importance of CSR and believed that the passive philanthropy was no longer sufficient. It was also reported that a significant proportion of respondents recognized CSR as the means to enhance long term stake holders value. Another most important aspect of CSR, according to the report, is that it provides an opportunity to improve relationships with local communities.

However, Hopkins (2003) found in his study that businesses that engage in CSR typically focus on some or all of the followings: environment: While focusing on this, organizations look at the environmental impacts of their products and services, as well as what they do outside the business to improve the environment, employees: The organizations who think in this perspective, they take care of all the employees adequately focusing on workplace conditions, benefits, living wages, and

training, communities: The organizations that care about communities they voluntarily take advance steps to improve the quality of life for employees and their families as well as for the local community and society, regulations: While focusing at this point, organizations respect the laws fully and often exceed them to be more socially responsible, emergency supports: Sometimes organizations keep plans ready to manage business crises and ensure safety for employees and surrounding communities. Besides they also take initiatives to provide support in times of emergencies such as disaster or epidemics.

Furthermore, Arora and Puranik (2004) declared that Indian CSR is still in a confused state. Their (2004) study concluded that though the Indian understanding of CSR seems to be shifting from traditional philanthropy towards sustainable business, philanthropic patterns still remain widespread in many Indian companies and community development still plays the decisive role in CSR agenda.

Ahmed (2009) contributed in the same context through an empirical research, under the supervision of ASSOCHAM Research Bureau, on 300 Indian companies which are active in 26 various theme areas for their CSR initiatives. Karmayog (2009) showed that community welfare perceived to be the top priority area on the corporate sector's list with a share of 21.93 per cent out of the total 26 activities. It involves activities that focus more towards the underprivileged community that lives around the vicinity of company plants, facilitating education and health care and supporting projects that lead to employment generation. The corporate sector helps in imparting education to the deprived kids in the urban areas along with the children from rural areas that do not have any access to medium of information. They provide funds that help in setting up local schools, colleges and centers for learning and education. Since, global warming is the buzz word now a days, Indian corporate sector as responsible members of the society have initiated their efforts to preserve and save it. Thus, environment is the third most prioritized area undertaken in CSR activities. CSR projects in this area deliver solutions that are both environmental and business friendly, providing financial benefits as well as improving the firm's image as an environmentally aware company. The fourth most popular area, that corporate sector get involves in is the health care.

The Indian companies are equally extending their support in the development of the rural areas. They are

providing both financial and infrastructural assistance towards agriculture, animal husbandry, cottage industries by developing local skills, using local raw materials and helping create marketing outlets. Thus, it is the fifth most prioritized area under CSR initiatives is rural development. Other CSR initiatives includes projects relating to women empowerment, donations, disaster relief, children welfare, poverty eradication, blood donation, Vocational training, HIV/AIDS awareness and relief work etc.

CSR Practices in Indian Banks

Banking in India originated in the last decades of the 18th century with the establishment of General Bank of India in 1786 and the Bank of Hindustan set up in 1870 (however both of the banks are now defunct). The oldest bank existing in India is the State Bank of India and the apex regulatory authority of Indian banking sector is Reserve Bank of India. At present, the commercial banking structure in India consists of Scheduled Commercial Banks & Unscheduled Banks. Since independence, banking in India has evolved through four distinct phases:

- Foundation phase (1950s till the nationalization of banks in 1969)
- Expansion phase (mid-60s to 1984)
- Consolidation phase (1985 to 1991)
- Reforms phase (since 1992)

Now-a-days CSR has been assuming greater importance in the corporate world including financial institutions and banking sector. Banks and other financial institutions start promoting environment friendly and socially responsible lending and investment practices. RBI (2007) has also directed Indian banks to undertake CSR initiatives for sustainable development and also asked banks to begin non-financial reporting which is related to activities in the era of environmental, social and economic accounting. It has been observed from karmayog's CSR ratings that most of the Indian public sector banks do not mention recent CSR activities on their annual reports or on the websites. The financial institutions do not take adequate steps for updating the recent activities in CSR. CSR has been assuming greater importance in the corporate world, including the banking sector. To highlight the role of banks in CSR, the RBI circulated a notice on December 20, 2007 for all the scheduled commercial banks in India. Recently financial institutions adopt an integrated approach between

customer satisfaction and CSR in a broader way. RBI also instructs the banks to integrate their business operation along with social and environmental aspects.

Banking sector in India is showing interest in integrating sustainability into their business models but its CSR reporting practices are far from satisfaction. There are only a few banks which report their activities on triple bottom line principles. As a matter of fact, the standards for rating CSR practices are less uniform in comparison to that for financial rating. This leads to problem in comparison of corporate houses and determining the CSR rating. The study found out that among the reporting banks also, some banks are making false gestures in respect of their efforts for socio- environmental concerns. Most of the Banks use CSR practices as a marketing tool and many are only making token efforts towards CSR in tangential ways such as donations to charitable trusts, NGOs, sponsorship of events, etc. Very few banks have a clearly defined CSR philosophy. Mostly banks implement CSR in an ad-hoc manner, unconnected with their business process and don't state how much they spend on CSR activities. Further voluntary actions are required to be taken by the financial bodies to ensure the socio-environmental feasibility of projects to be financed. Indian banking sector must also portray their socially responsible behaviour through integrating triple bottom line principle. Financial Institutions can do a lot to assist efforts for social responsibility and achieve sustainability. Banks must also provide appropriate training to its employees on environmental and social risks in lending to ensure that climate change is taken into account in corporate banking decisions.

Area of Interest in CSR

- (a) Energy conservation: Banks are reducing the environmental footprint of their business operations by minimizing emissions while cutting costs. There is widespread use of paperless statements, electronic payments, as well as carbon neutral buildings and tele-presence.
- (b) Environment: The financial services sector is facilitating the transition to a low-carbon economy. By financing green innovation and infrastructure development, FIs are exploring new avenues of growth.

- (c) Education: FIs partner with non-governmental organizations (NGOs) that educate children from underprivileged communities. They also provide vocational training and essential money management skills to the youth.
- (d) Healthcare: FIs support healthcare of the underprivileged by providing financing and insurance solutions. Banks partner with NGOs to conduct healthcare awareness programs and free medical service camps.
- (e) Emerging markets: Western and domestic banks are discovering new linkages between business success and social development in emerging markets. These firms are facilitating economic development through credit provisioning and microfinance initiatives
- (f) Donation and sponsorship: FIs promote sports and educational events, exhibitions of art and culture, disaster relief programs, etc. Given the budgetary constraints from year-to-year, this area has its limitations.

Problems Faced by Financial Institutions for Implementing CSR:

Financial institutions (FIs) operate in a dynamic business environment, where budget cuts are the norm. Consequently, FIs face challenges in their effort to make CSR sustainable.

Absence of a Framework: Financial institutions undertake CSR activities without a framework for benchmarking CSR. The actual value of CSR cannot be quantified due to the lack of best practices.

Competition: Financial institutions operate in a competitive environment. Contributing to one-time CSR activity is often limited by budgetary constraints and the bottom line.

Financial Regulations: Dynamic regulations demand that maximum spending goes toward regulatory compliance. For a sustainable business, FIs must partner with governments to shape regulation through joint working groups, and engage with stakeholders for collaborative approaches for development and local infrastructure

Demanding Customers: Customers seek sustainable products and services. Financial institutions need to create favorable market conditions and a conducive business environment. FIs must identify opportunities for new products and services created by sustainable CSR such as financing of low-carbon infrastructure and 'green' technologies.

Downsizing: In an uncertain business environment, financial institutions are downsizing. CSR may not prevent downsizing, but companies can make an effort to downsize in a responsible manner.

Right Metrics: CSR metrics such as energy consumption, water usage, and CO2 output accurately reflect a firm's sustainability activities. However, prioritizing projects by internal and external stakeholders, and identifying the CSR projects that have maximum impact is challenging.

People: Sustainable CSR requires an intimate understanding of how individuals take decisions about environmental and social issues. The primary challenge is to attract and incentivize employees who drive CSR programs.

Government Policies: Financial institutions must have an in-depth understanding of public policy to address issues of sustainable CSR. For instance, if a company policy on waste management conflicts with the policy on energy consumption, the company has to adopt a policy that provides the maximum benefit to society.

Business case: Putting a dollar value on sustainable business operations such as brand name and customer loyalty can be a challenge for a majority of organizations. Moreover, Wall Street does not embed CSR in the valuation of a company.

Sustainable CSR: The Best Way For Implementing CSR

Financial institutions can implement sustainable CSR initiatives by aligning CSR with the business strategy through a well-defined business case. For instance, responsible retail consumer product companies contribute a percentage of their product price to CSR activities. When customers are incentivized to buy products more often, they boost the CSR efforts of the company. Responsible companies need to develop a framework that makes CSR

sustainable seamlessly by leveraging capabilities and enhancing the competitive advantage of the company.

CSR has yielded significant benefits to society such as community welfare, economic development, and environment protection. In addition, financial institutions have realized intangible benefits, as shown in following Figure.

<p>Enhance Brand Equity</p> 	<p>Builds Trust and Confidence</p> 	<p>Improves Financial Performance</p> 	<p>Increases Business Growth</p> 
<p>Financial institutions can boost their brand image through CSR activities. Responsible companies face far lesser scrutiny from regulatory authorities.</p>	<p>In an uncertain business environment, CSR activities help financial institutions rebuild trust and relationships with different stakeholders</p>	<p>CSR activities can directly contribute to the bottom line. According to a study commissioned by the Global Alliance for Banking on Values (GABV)*, values-based banks deliver higher financial returns. Responsible banks outperform traditional banks across financial indices such as return on assets, growth in loans and deposits, and capital strength – a compelling case for values-based banking.</p>	<p>There is a correlation between CSR activities and business growth. Prospects of a business increase when CSR is aligned with business. It could be due to the brand loyalty of customers.</p>

Figure: 1

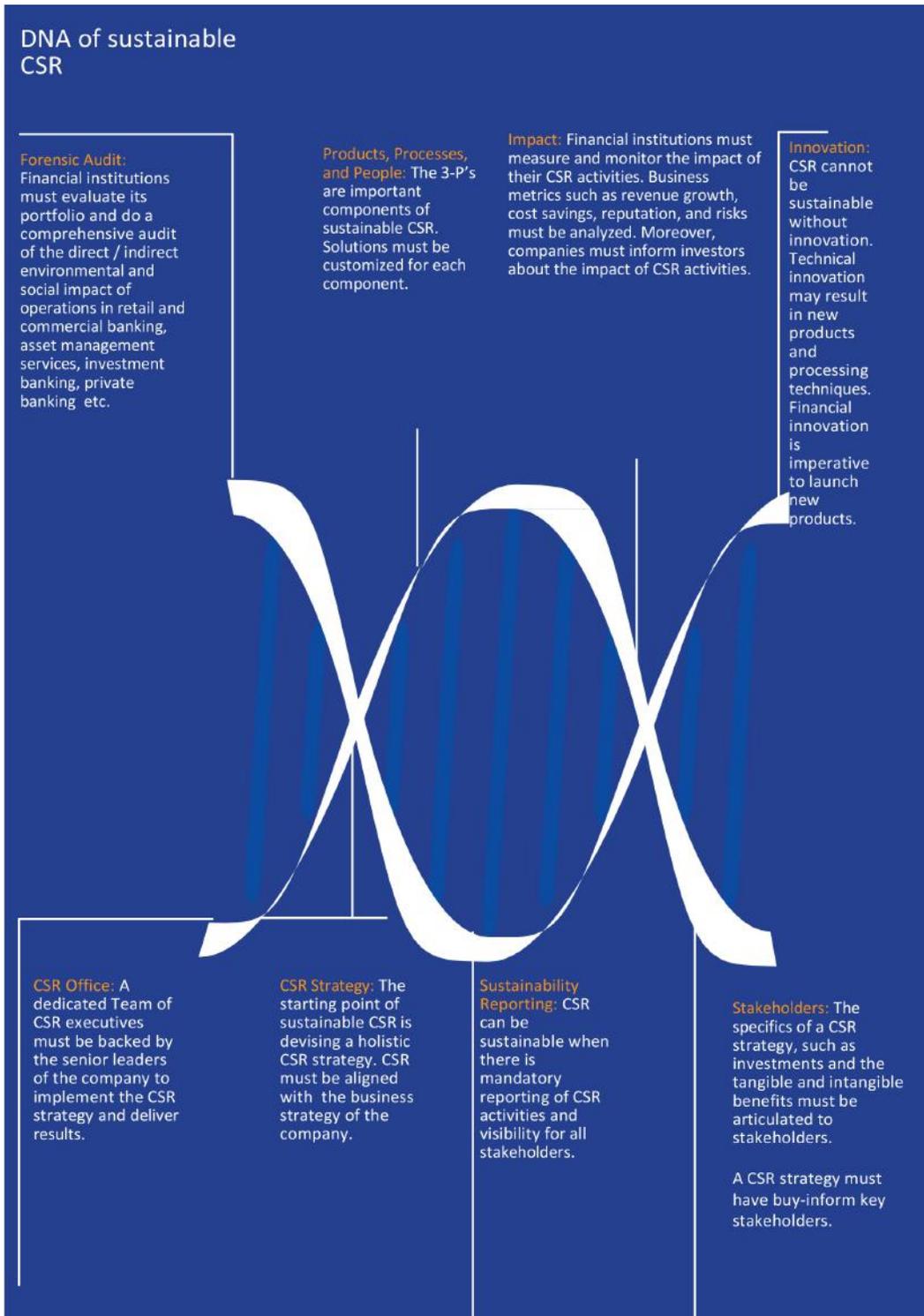


Figure: 2

The 3-P's of Sustainable CSR

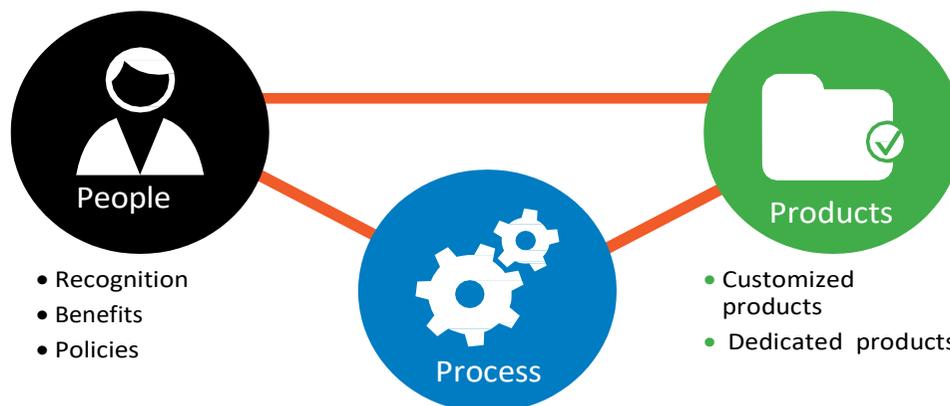


Figure: 3



Figure: 4

Recognition

- A reward and recognition (R&R) system can be instituted to recognize employees who actively participate in CSR activities
- CSR initiatives of employees showcased in a monthly or quarterly magazine will serve as role models

Benefits

- Employee can earn points for CSR activities. They can redeem these points for financial products like discounts on the home loan interest rate, insurance premiums, etc.

- Customers and investors can earn reward points for e-statements and purchasing green / energy efficient products

Policies

Employee-friendly policies such as telecommuting for physically challenged employees or working others and environment-friendly transport policies such as carpooling boosts the morale of employees.

**Figure: 5****Inter-relationship**

- FIs can identify new revenue streams and create business verticals with domain experts to develop sustainable business solutions across the sustainability spectrum. The collaboration between units in a company can offer new services in agricultural / rural banking, microfinance institutions, sustainable investment banking, inclusive and social banking, and socially responsible investing
- Synergies of different lines of business can be leveraged to offer CSR to a wider audience

Technology

- Green building: Financial institutions can adopt Leadership in Energy and Environmental Design (LEED) standards and apply for LEED certification
- Green IT: Companies can use virtual servers, the cloud- and energy-efficient IT platforms while upgrading their IT infrastructure and consolidating printers
- SMAC Social media: ACSR initiative can be promoted over social media

- Mobility: E-statements can be transmitted to mobile devices
- Analytics: Tools can identify the right customer segments to personalize CSR activities
- Cloud: Value-added services can be delivered using the cloud, apart from HR functions, back-end processing, and other administrative tasks
- Energy audits: Banks can undertake energy audits for existing technologies and explore new initiatives that are far more effective

Reporting

- Transparency in reporting financial and operational activities to different stakeholders
- Monitoring carbon emissions and footprints, and reporting to different forums
- Become a signatory to international sustainability projects such as the Carbon Disclosure Project

**Figure: 6**

Dedicated products

- Products that contribute to a cause viz. environment, health or education
- Targeted lending to low-income families, minorities, women, immigrants, small businesses, community non-profit agencies, and sustainability-related organizations
- Accredited small and medium enterprise (SME) customers can receive special offers on products and services to reduce the ecological impact.
- Business loans with preferential interest rates can be offered to customers who are granted ISO 14001 or equivalent environmental certification
- Innovative products such as energy efficiency mortgage, green lending, insurance, etc.
- Cause-driven products to help customers adopt energy-efficient solutions

Customized products

- Discounted mortgage: Attractive mortgage rates can be offered as an incentive to install energy saving technologies in homes and offices
- Products / services:
 - Education: Products that impart education directly or indirectly such as teaching customers / prospective customers on basic financial literacy or games for children to inculcate money management skills
 - Health: Products that support financing expensive health treatment such as EMI facilities for the treatment of cancer and cardiac surgery
 - Environment: Insurance products that offer cover based on their ecological impact. Premiums for auto insurance can be based on a vehicle's emissions. It motivates drivers to reduce emission levels
 - Carbon risk analysis: Lending arms of commercial banking can continuously perform carbon risk analysis for potential carbon legislation before lending

- Integrated products
- FIs can combine CSR areas and offer integrated products rather than contributing to one cause
- A customer of an environment-friendly product can gain a discount on health insurance for parents. An interrelated environment, health and education model is sustainable since it is aligned with business growth
- Banks can explore carbon finance in emerging markets.
- FIs can partially finance the carbon emission reductions (CERs) model for energy conservation through carbon credits. Each CER amounts to the reduction of one ton of CO₂ emission.
- CERs can be sold to organizations that have emission reduction obligations under mandatory cap-and-trade programs such as the EU Emissions Trading Scheme and the Australian Carbon Pricing Mechanism.

A Road Map for Sustainable CSR

- Identify the maturity level of CSR activities – from reactive to proactive level
- Get commitments from key stakeholders – buy-in from senior leadership is imperative
- CSR must be aligned with business strategy, and the CSR strategy must clearly define CSR objectives, milestones, and pay back.
- CSR strategy must adopt the 3-P approach illustrated in Figure 2
- Engage all stakeholders (investors, lenders, employees, unions, customers/users, supply chain, joint venture/partners, alliances, local communities, governments, and regulatory authorities) and open a channel of communication
- Implement CSR across lines of business
- Define metrics for assuring CSR payback
- Undertake audit based on performance metrics and institute controls to remedy gaps

Conclusion

At present the Banking Sector performing their banking services more effectively in comparison with the past and also started working towards social banking that is Corporate Social Responsibility. Maximum number of banks whether related to private sector or public sector highly performing CSR activities as per their priority but if we look towards the CSR reporting then we can see that most of the banks are still not disclosing their amount for such initiatives in their websites. After the involvement of RBI the CSR becomes the important part of Banking Sector but still more regulations and new policies are required to implement the concept of CSR in Indian Banking Sector. RBI should made some criteria to distinguish between the banks conducting CSR practices and those not conducting, on the bases of their involvement in social banking and some percentage must be set for spending on CSR activities by all the established Banks and a proper monitoring is required by a committee on the working of Banks so that the Banks work for their profit along with contributing towards the society because Corporate social responsibility is just not the charity but a practical implementation of ethical ideas towards the society.

The perspective of Corporate Social Responsibility by initiating social and community initiatives is to benefit the society and nation at large which sought to be achieved through the participation of its employees. Though these five banking sectors have taken effect in the era of CSR but it is not satisfactory. In order to attain the social objectives there is a need to frame a CSR policy in every bank and prioritization of activities for social spending and allocation of separate funds should be given for this specific purpose. The banks also created maximum value from its activities and developed strategies to effectively communicate progress with various stakeholders and provide information on the issues that concern them. To have an impact of spending and utilization of allocated budget by CSR there should be a system of periodical monitoring and reporting to the Board of Directors. Most banks use CSR as a marketing tool to spread the word about their business, Generally speaking, most banks seem either unaware or don't monitor their CSR. Special training needs to be given to business managers in working with social issues and Participation of small and medium business should be encouraged... The concept of CSR has failed to some extent to take deep root in India because of lack of coordination between the banks, government, and non-government organizational efforts. The Financial

Institutions should realize that running an efficient and profitable business organization means ensuring that the surrounding communities and environment grew and prospered along with the institutions. In a nutshell, it can be said that the state of mind of the Indian entrepreneurs towards CSR is changing due to tough competition in an international level. Conclusively, there are three suggestive measures which are advisable for a better CSR in these banks. First is to enhance and accelerate government's involvement in CSR activities, Second can be noted as development of a broad sector of the consulting in the era of CSR, and lastly media should increase its interest and play a vital role in the era of CSR.

FIs must realize that CSR is an intrinsic part of a sustainable business. CSR needs to be embedded into every aspect of business, including product design, innovation, operations, supply chain, and marketing. Financial institutions must integrate CSR with their core strategy, product design, mission, and company policy. An effective CSR strategy should be well- formulated, articulated, and aligned with business. It must also have the unstinting support of key stakeholders to become a long-term sustainability agenda.

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Corporate Announcements like Rights Issue and its Impact in Indian Stock Market Efficiency

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Abstract:

Many research studies have found that corporate events have numerous effects on the stock market. In this regard the aim of this paper is to test the semi-strong form of efficiency in the Indian equity market following event study approach. The event considered in this paper is rights issues that have taken place in the market from 2002 to 2015. All the three events are tested for abnormal returns and liquidity. The data selected is free from the impact of confounding events. Four estimation windows are taken (-30 to 30, -20 to 20, -10 to 10 and -5 to 5) for all the events to test the abnormal returns. But only 30 days window is taken to test the change in liquidity. The results suggest that in case of rights issue there is no change in liquidity in both the periods.

Key words: *Efficient Market, Random Walk Hypothesis, Event Study, Confounding Events, Abnormal Return*

Introduction

This section is logically divided into three parts. First part describes the efficient market hypothesis (EMH) in detail. Second part comprises the basic understanding of the Indian equity market. Where as, the third part explains the theoretical background of various events (bonus issue, stock splits and rights issues) considered in the study. The general discussion of abnormal returns, confounding events and liquidity is encompassed in the last part of the section.

Efficient Market Hypothesis (EMH)

Efficient Market Hypothesis (EMH) signifies that all appropriate information is quickly and fully assimilated in a security's market price; thereby guessing that an investor will obtain an equilibrium rate of return. In other words, an investor in the market should not anticipate to earn an abnormal return. There has been a large body of academic community, mainly economists and statisticians, who subscribe to the hypothesis of random walks in the stock market prices. Random-walk theorists generally start from the premise that the major security exchanges are good instances of efficient markets. In an efficient market, the measures of the many contending participants, leads to actual prices already reflecting the

effects of current available information and the real price of a security to wander randomly about its intrinsic value. Therefore, a market where consecutive price changes in individual securities are independent is, by definition, called a random-walk market (Fama, 1965). The random walk theory affirms that all information is replicated in the current stock prices. Therefore any new information would also take little time to be completely incorporated in the prices, and market players, thus, would have little time to exploit this new information to realize above normal profits.

Fama (1970) recognized three forms of market efficiency explicitly; the weak, semi-strong and strong form. Weak form of market efficiency says that current stock prices fully reflect all past information. Hence, any attempt to forecast prices based on historical prices or information is completely futile, as the prices follow random walk process. Semi- strong form expands the idea of efficiency a little further and describes that current stock prices replicate all publicly available information. It also believed that prices adjust to such information very quick, so above normal returns on a consistent basis cannot be earned. The strong form explicates the situation where all pertinent information, whether it is within the public domain or private domain, will be reflected in the stock market price. Subsequently Fama (1991) changed the classifications

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and exposure of informational efficiency. According to him the weak form also covers the more common area of test for stock return predictability. This includes work in predicting returns with variables like stock dividend yields and interest rates. He further stated that semi-strong tests now described event studies and strong form tests will be termed tests for private and corporate insider information. In event studies, it is measured how quickly stock prices respond to different pieces of news, such as corporate earnings or dividend announcement, news of a merger and takeover, or macroeconomic news. The present paper is based on to study the stock price reaction to bonus issues, stock splits and rights issues which thus supported on the test of semi-strong form of market efficiency.

Normally, the exploration of semi-strong form market efficiency has been limited to the study of well-developed stock markets in the world. The aim of this research is to observe the stock price reaction to information release on bonus issues, stock split and rights issue with a view of examining whether the Indian stock market is efficient in its semi-strong form or not. Over the past half century, event studies have been employed in much research studies across the globe and their superiority has been greatly improved by Dolley (1933), Fama et al. (1969) and Brown and Warner (1985). The similar methodology has been used to contribute additional confirmation on the efficiency features of the Indian stock market.

Indian Equity Market

Many stock market studies have been apprehensive with market efficiency, however the majority of the markets under examination have been mature markets such as the New York Stock Exchange and London Stock Exchange (Bris et al. (2004); Schwert (2002)). This present study tries to consider the market efficiency of an emerging stock market like India. The Indian equity market has been portrayed as an emerging market (Raju and Ghosh (2004); Mahfuzul et al. (2004); Yartey (2008)) and in the subsequent pages the author attempts to study whether the Indian market is efficient in its semi-strong form or not through an event study methodology. Indian equity market is mainly executed on the basis of two major stock indices, National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE). The benchmark indices in these two exchanges are Sensex (30 stocks) and Nifty (50 stocks) respectively. In both these stock exchanges trading is being carried on in a dematerialized form. However there

are about 22 stock exchanges in India which regulates the market trends of different stocks in the economy. There is the SEBI or the Securities and Exchange Board of India which controls the functioning of the all stock markets in India.

With the liberalization of Indian economy in early 1990s, it was found inescapable to boost the Indian stock market trading system on parity with the international standards. In the past few years with the facility of online stock trading in India, it has been extremely convenient for the investors to trade in the Indian stock market. Hence over the years Indian equity market became a lucrative destination for both domestic and foreign investors. Foreign investment in general enjoys a mainstream share in the Indian equity market. Thus, the rising capital markets of India being encouraged by domestic and foreign investments is becoming a profitable business more with each passing day. If all the economic parameters are unaffected, Indian equity market will be conducive for the growth of more and more foreign capital flow and this will lead to an overall improvement in the Indian economy.

Theoretical Background of Events

The semi-strong form of market efficiency guides the security prices to react instantly to any new information. Some of the tests of semi-strong efficiency in securities markets in the world center around the study of events such as public announcements, company reporting and dividend disclosures. The researches on event studies are enormous in number, and the literature continues to grow further in recent times. Event studies commonly examine the behavior of firms' stock prices around the corporate events.

The first event for the present study is bonus issue; which is basically the distribution of additional stocks to the existing shareholders in proportion of their current holding. A company can issue bonus stocks by utilizing retained earnings or accumulated capital reserves. As a result each shareholder holds greater number of stocks of the company and their relative claim on the assets of the company is smaller. Since bonus issues do not improve earning power, firm's capital structure, or expense reduction, the total market value of the firm in lack of information asymmetries should remain the same. Only correction caused by bonus issue is that the number of outstanding stocks is adjusted by the bonus issue ratio,

thus, the price of the stocks declines on the basis of the same bonus issue ratio (number of bonus stocks in the issue/number of existing stocks applicable for the bonus issue). The total market value of the company stocks or the value of the stocks that are held by individual investor should remain unaffected. Miller and Modigliani (1961) explained theoretically that bonus issues, along with other types of dividends declared by companies, do not amend stockholders' wealth. Likewise, Sloan (1987) presented Australian evidence that bonus issues do not influence stockholders' wealth.

However, many empirical researchers have revealed that the market normally reacts positively to the company announcement of a bonus issue or stock dividend (see, Fama et al. (1969); Foster & Vickrey (1978); Woolridge (1983); Eades et al. (1984); McNichols & Dravid (1990); Anderson et al (2001); Obaidullah (1992) and Rao (1994)).

The second event considered in the study is the stock split. This means there is a sub-division of a share of large denomination into shares of smaller denominations. The company declares the split ratio on a particular date called the record date. All shareholders whose name appears on the company's record on the record date will be entitled for the extra shares. A few weeks later, the stocks will start trading at ex-split price on the stock exchanges. The fundamental difference between a bonus issue and a stock split is that, bonus issues are the free additional shares issued by companies, accompanied by a book entry to relocate the retained profits or accumulated reserves into paid-up capital in the shareholders' fund section of the company balance sheet. Whereas stock split is the same share divided into two. In a stock split, the number of shares increases but the face value falls. The face value never changes in case of bonus shares. So stock split is just a technical modification in the face value of the stock. But there is no other change in the company. Here the only benefit for investors is that they can buy shares of a company which are atrociously expensive at a less price.

The third event undertaken in the study is the rights issue. It is the issue when a listed company proposes to issue new securities only to its existing shareholders at a price. The rights are typically offered in a particular ratio to the number of securities held by the shareholders prior to the issue. As a result each shareholder gets to acquire a certain number of shares, based on their current holding. Right issues are not free shares of the company, but the

shareholders get complete right to own those shares at a price. The amount per right share is generally lesser than the current stock price. Given this the shareholders will exercise their right and the number of shares will increase thus reducing the earning per share. This route is appropriate for companies who would like to mobilize capital without diluting stake of its existing shareholders unless they do not intend to subscribe to their entitlements.

Although stock split and rights issue, unlike most cash dividends and capital structure changes do not directly affect the corporate future cash flows, a large number of research studies in finance give evidence on positive stock price reactions in response to such announcements (see, Ball et al. (1977); Rankine and Stice (1997); Tan et al. (2003). In contrary to this other researchers established a negative stock market reaction to corporate events, particularly rights issues (see, Kabir and Roosenboom (2003); Marsden (2000))

Abnormal Returns, Confounding Events and Liquidity

Abnormal returns are impartial estimation of changes in the market value of the firm during the event period, which replicate the price reaction to the event. The abnormal return for the stock of firm i on event day t is calculated as: $AR_{it} = Rit - R^*_{it}$

Where, AR_{it} : Abnormal return of i th firm for time period t ; R_{it} : Actual return of i th firm for time period t ; and R^*_{it} : Normal return of i th firm for time period t .

It is the return that an investor gets over and above the normal returns. There are several common alternatives for estimating normal return for instance, market model and mean-adjusted normal return model. However, market model is generally accepted as the manner to estimate normal return. In the present study market model is used to estimate normal returns:

$$R^*_{it} = \alpha_i + \beta_i R_{mt} + e_{it}$$

Where, α : Intercept term, β_i : Systematic risk of i th firm, R_{mt} : Actual return of market for time period t , and e_{it} : Error term, with $E\{e_{it}\} = 0$.

Normal returns are the returns an investor gains due to his standard course of trading. Means the period during which

any event, that can influence his returns has not occurred. Now once some event transpires, it may contaminate the usual course and results an abnormal return.

To study the impact of particular event on share prices, the event study methodology followed by researchers isolates events from each other. To execute the procedure appropriately, all confounding events around the event window, a period prior and subsequent to the event date, need to be controlled for. Confounding events comprise movements in the overall market and/or firm-specific events like acquisitions or divestitures or bonus announcement or stock split or rights issue. If the bonus announcement or other major firm-specific events takes place within the event window, the firm is usually removed from the sample. It is because, if we calculate the abnormal returns, we cannot sure that this returns calculated depict the abnormal returns due to the bonus announcement or other major firm-specific events declared on the same day. However, if all the events are kept, the researcher exercises some other approach to control for the influence of the confounding event on the study's results (see, Lijleblom, 1989). But in the present study the author has removed the firms which witnessed some confounding events. The firms that remain are those whose share prices have altered because the overall market moved or because of the event being studied.

Market liquidity is a significant factor which affects market efficiency. It is an indicator of market depth and demonstrates the absorption power of risk premium. The market liquidity can be considered as one of the factors influencing the price discovery function. It may be influenced by uncertainties, in the sense that market prices do not disclose all available information or the market price will momentarily deviate from the market-clearing equilibrium price or price discovery function, and will, as a result, manipulate market efficiency (Brown and Zhang (1997).

Over the years many researchers demonstrated the relation between corporate events and its impact on liquidity. Miller and Modigliani (1961), in their influential work formally developed the dividend irrelevance hypothesis. They described that in perfect capital markets populated by rational investors; a firm's value is solely a function of its investment opportunities and is independent of the firm's payout policy. On the contrary other existing literature argues that stock market liquidity influences the

valuation of firms both in the cross-section and through time (See, for example, Amihud (2002), Brennan and Subrahmanyam (1996), Brennan et al. (1998)). Firms, however, can pay dividends, reduce investor dependence on the liquidity of the market, and therefore raise their valuations. Indeed, Baker and Wurgler (2004) present significant evidence that, firms consider valuation effects when choosing a dividend policy.

The hypothesis that has received strongest support in elucidating the positive market response to stock dividend announcements is the signaling hypothesis (Foster & Vickrey (1978); Grinblatt et al. (1984); Lijleblom (1989); Masse et al (1997)). This suggests that 'the declaration of a stock dividend conveys new information to the market in instances where managers have asymmetric information'. This hypothesis has received almost clear support with little exception (for example, Papaioannou et al. (2000); Banker et al. (1993); Ghosh and Woolridge (1988)). Lakonishok and Lev (1987) studied liquidity hypothesis, which suggests that stock dividend messages are intended to improve liquidity, as the floatation of additional stocks should lead to an improve in trading and greater ownership dispersion in a firm. Grinblatt et al (1984); Doran and Nachtmann (1988) observed the attention getting hypothesis advocating that managers use stock dividends to draw attention from professional analysts and to activate a revaluation of their firms' future cash flows. Both of them establish a positive market reaction to stock dividend announcements.

In regards to other events like stock split and liquidity issues, more support for the liquidity effect is found from Schultz (2000). He found that the frequency and volume of small trades enhance following a stock split. Other previous research has also recognized positive price performance following to stock splits. Grinblatt et al. (1984) and Lamoureux and Poon (1987) uphold the signaling hypothesis that firms use stock splits to indicate future positive earnings. While other studies, such as Lakonishok and Lev (1987) find that volume declines subsequent to a split.

Nevertheless existing empirical research study, finds that the impact of stock split on liquidity is mixed. Conroy and Harris (1999), and Desai et al. (1998), find that bid-ask spreads raise indicating worsened liquidity. Other authors, such as Lamoureux and Poon (1987), show that the quantity of trades per day, increase following to the

splits. If some bad news comes out with reference to a firm subsequent to the split, the stock price may sink below the range that the firm managers and shareholders consider (Brennan and Copeland (1988)).

Literature Review

Several studies have been conducted in developed and emerging markets in view of corporate announcements and its impact on stock market prices to study the market efficiency since Working (1934). Working found that successive stock prices changes are independent in nature and uncorrelated that forced him to conclude that they are random. This conclusion of Working were supported later by Robertsn (1959); Fama (1965) and others. The Efficient Market Hypothesis has been executed in hundreds of studies over the years (including, Fama & French (1996); Malkiel (1995); Ikenberry et al. (1995); Elton et al (1993), Chopra et al (1992); Seppi (1992); DeBondt & Thaler (1985); Charest (1978); Black & Scholes (1974); Alexander (1961)).

It is not that some studies have produced confirmation against the random walk hypothesis, showing that stock returns comprise predictable fundamentals. Much of this type of work has concentrated on the world's largest and developed stock markets, including the United States, Europe, and Japan (Poterba & Summers (1988); Lo and MacKinlay (1988)). More recently, in emerging markets like Latin America and Asia mixed evidence on the random-walk hypothesis has been found (Grieb & Reyes (1999); Huang (1995); Chang & Ting (2000)).

Event studies serve as a significant step in capital market research as the principle means of testing semi-strong form of market efficiency. Scientifically, non-zero abnormal security returns that continue after a particular type of corporate event are inconsistent with market efficiency. Event studies have a long history, comprising the original stock split event study by Fama et al. (1969). As the substantiation was conflicting with the market efficient, hypothesis started to grow in the late 1970s and early 1980s, and then the interest in long-horizon studies continued. Investigation on the post-earnings announcement effect (Jones and Litzenberger, 1970), earnings yield effect (Basu, 1977) and size effect (Banz, 1981) contributed to cynicism about the Capital Asset Pricing Model (CAPM) as well as market efficiency.

Peterson (1971) suggested that an increase in stock price

following an event can occur because the announcement of a bonus issue may have beneficial information content. In the similar line Foster and Vickrey (1978) observe the signaling hypothesis using daily return data and information content of 82 stock dividend announcements. They found that there is a considerable positive abnormal return around the announcement dates. Woolridge (1983) found a positive average abnormal ex-date return of 0.98 percent for a sample of 317 stock dividends and propose that the ex-date effect could arise from market flaws such as taxes and odd-lot transaction costs. Grinblatt et al. (1984) considered the 1967 to 1976 ex-dates of stock dividends distributed and found an average abnormal return of 1.1 percent. This finding is also interpreted as a confirmation of signaling hypothesis. Lijleblom (1989) investigated the signaling hypothesis by considering stock market price response to bonus issues for the firms that also concurrently release other contaminating information, for instance release of past earnings. His findings indicate that there is a greater positive stock price reaction for the bonus issue-paying group than for the control group. This finding is interpreted as a support of signaling hypothesis in the existence of other contaminating announcements. McNichols and Dravid (1990) find a positive relationship between the bonus issue announcement and related abnormal return. Their result provides fact that is consistent with a signaling explanation for stock dividends. A Canadian study by Masse et al. (1997), exploring the impact of stock dividend announcements on the value of the firms listed in Toronto Stock Exchange, establish significant and affirmative abnormal returns around the announcement date.

Efficient market hypothesis articulates that any market value results caused by stock dividends must be completely discounted by the ex-dividend day. Therefore, the stock price should adjust on the ex-dividend day only to the level justified by the stock dividend percentage declared. Woolridge (1983b) verifies this hypothesis and found that the price adjustment is less than what is consistent with stock dividend percentage. Frank and Jagannathan (1998) and Bali and Hite (1988) studied the US and Hong-Kong firms respectively and analysed the stock return on the ex-dividend day. Both the studies considered the microstructure argument (distinctness in trading prices and tick-size) model to study the investors' behavior in the market. They found that there is a positive investors' reaction and also positive abnormal returns consistent with such arguments.

Grinblatt et al. (1984) studied the attention getting hypothesis and justified that there is a positive market reaction to stock dividend announcements. Doran and Nachtmann (1988) employing a sample of 879 firms which issue stock dividends between 1971 and 1982 found that instantly after the stock dividend there was a considerable positive revision in earnings expectations similar to attention getting hypothesis. Ghosh and Woolridge (1988); Banker et al. (1993) examined the cash distribution hypothesis found that the negative reaction to dividend cuts could be offset or narrowed by an announcement of stock dividend as a substitute.

Lakonishok and Lev (1987) who tested the optimal range hypothesis on the stock split and stock dividend stated that, after the announcement stock prices adjust to a more trading range which in turn increases the demand for stock and leading to a positive stock price effect. Other researchers like Johnson (1966) and McNichols and Dravid (1990) further supported the idea of optimal trading range hypothesis.

Managers use financial decisions such as stock split and bonus issues to convey a favourable private information about the current value of the firm as suggested by Ross (1977) and Leland and Pyle (1977). Eades et al. (1984) found that there is a significant positive ex-date return by companies listed on the New York Stock Exchange during the period between 1962 to 1980 for a sample of 2110 stock dividends and stock splits. Their results were accounted not just for the ex-day, but also for the five days either side of it. However it was found that ex-day itself exhibited the largest average abnormal return and indicated that positive abnormal returns were also significant on the day prior to it and on the two days subsequent to it. In the similar line Lakonishok and Vermalen (1986) reported a substantial positive abnormal return for a sample of 2558 stock dividends and stock splits. They considered each of the five days prior to the ex-day, the ex-day itself and the two days subsequent to it and found that the largest abnormal return is explained on the ex-day itself.

Several studies in market efficiency do not distinguish between stock split and stock dividend. But the researchers like Wulff (2002) and Rankine and Stice (1997) found that the announcement effect is more pronounced for stock dividend than for stock split. In the similar line Grinblatt et al. (1984) propose that stock dividend signal has greater future earnings expectations than stock split. Eisemann

and Moses (1978) and Baker and Gallagher (1980) surveyed manager's views regarding stock dividends and stock splits respectively. They described that firms' issue stock split with an intention of keeping stock price in an optimal range whereas the stock dividend is related to preserve cash and to convey confidence in the firm and to enlarge the number of shareholders.

Generally equity offerings are made either through rights offers or firm-commitment underwritten offers, where the whole issue is sold straight to an underwriter. In Europe, Canada, Australia, New Zealand and Asia (including India), a large fraction of equity issues are sold through rights issues (see, Marsh, (1980) (UK); Loderer and Zimmerman (1988) (Switzerland); MacCulloch and Emanuel (1994) (New Zealand); Ferris et al. (1997) (Japan)). In contrast, firm-commitment underwritten offers prevalent in the U.S market and continued since the 1960s (Eckbo and Masulis, 1992). According to the findings of Kothare (1997), less than 10 percent of U.S. firms issue equity shares through rights offerings.

Kothare (1997) and Bae and Jo (1999) carried out their study particularly in US market (NASDAQ and NYSE respectively) on rights issues and volatility in the market. Kothare finds that there is no change in volatility in the stock price after rights issue announcement whereas, Bae and Jo find decreasing volatility following rights issues. A probable explanation for the different finding can be that Bae and Jo used shorter pre- and post-issue periods. In the same framework some researchers argue that there is a small increase in the number of shareholders following rights issues for the Norwegian and Finnish stock exchanges (Bohren et al. (1997); Hansson (1999)).

Individual firm's volatility level may be significantly affected due to changes in ownership structure. There are three earlier studies regarding ownership concentration around the rights issues. Kothare (1997) observes at ownership concentration for 26 of her 85 rights issues on the NASDAQ stock exchange and finds that a small insignificant increases for insider holdings and large block holdings following rights issues. On the contrary, Bohren et al. (1997) studied 200 rights issues on the Oslo Stock Exchange (OSE) between 1980 and 1993 and found that a small insignificant decreases in block holdings and insider holdings.

Other studies on rights issues have accounted negative

announcement period returns (see Burton et al. (2000); Suzuki (2000) for UK; Singh (1997) for US; Marsden (2000) for New Zealand; Kabir and Roosenboom (2003) for Netherlands). Conversely, positive announcement period abnormal returns immediate to rights issues are reported by Tsangarakis (1996) for Greece market, Bohren et al. (1997) for Norway market and Kang and Stulz (1996) for Japanese market rights issue announcements.

There are very few research studies have been conducted to test the semi-strong form of market efficiency in India. Ramachandran (1985) studied the impact of bonus issue announcements on Indian equity stock prices. He found a varied evidence of semi-strong form efficiency in the Indian stock market. Obaidullah (1992) accounted a positive stock market reaction to bonus issue announcements and supported the semi-strong form of market efficiency. Rao (1994) suggested that the Indian equity market responds in an expected direction to firm announcements and supported the semi-strong form of efficient market in India. He projected a cumulative abnormal return of 6.3 percent around the three days of bonus issue announcement. Srinivasan (1993) in his study established enormously large positive abnormal returns on ex-bonus and ex-rights dates for Indian stocks. Mishra (2005) found that there is a significant positive abnormal return for a five-day period prior to bonus announcements.

Research Methodology and Data

From the above reviewed literature studies it is evident that lot of work has been done considering a single event and a single investigation window. In the present paper the author considered rights issue to find the market reaction during the same period. In order to study the closer impact of an event there are four different investigation windows (-30 to +30, -20 to +20, -10 to +10 and -5 to +5) from the event date "0" are chosen so as to see which of these windows the effect is the maximum.

This section is divided into three logical parts. The first part outlines the hypothesis of the study. The data source and description is enumerated in the second part. The third part constitutes the process followed to proof the hypothesis and to get the desired results.

Hypothesis

As mentioned earlier rights issue are accepted in the

present research to study the semi-strong form of Indian market efficiency. For this event the abnormal returns are estimated with four investigation windows (i.e., -30 to +30, -20 to +20, -10 to +10 and -5 to +5 from the event date). But the change in liquidity is tested for all the events considering only the -30 to +30 days window. There are basically 15 (3 X 4 + 3) hypothesis drawn in this paper. They are:

Null Hypothesis for abnormal returns: H1-H12 – The market is efficient in its semi-strong form and there are no abnormal returns in stock prices for rights issues in any of the four investigation windows (-30 to +30, -20 to +20, -10 to +10 and -5 to +5).

The Null Hypothesis for liquidity: H13-H15 – There is no significant change in liquidity of stocks for rights issue for the investigation window -30 to +30 days.

Data Source and Description

The stock market data for the analysis is taken from Prowess database published by Centre for Monitoring India Economy (CMIE). The stock data includes all the stocks which have been listed in the National Stock Exchange from 2002- 2015. Data has been collected for events and it is revealed that there are 177 companies went for rights issues respectively during the period 2002-2015 in Indian market. The sample companies are taken after removing the confounding events of the respective companies. This is because to negate the influence of other confounding events on the main event undertaken in the study. The major events like merger and acquisition, bonus issue, rights issue and stock split are taken, and if any of the two events happened in the same event window for the same company, then the company is taken out from the sample. This is done to ensure that some other event does not influence the returns of the stock, thereby leading us to a reliable result.

Methodology Adopted

To devise an event study, the event, event window, estimation window, investigation window and the estimation model should be determined. An event is what the investigators would like to study, and it conveys the information that potentially influences the stock market prices. An event window is the period in which an event occurs in the market. Essentially, an event window should

be a period when the incident of the event is publicly announced. In instances where the event is publicized after trading hours and then impacts on the next day's stock prices or that there is a time difference in the announcements in different news media, the event window is expanded to three days. The event window in this research is combined with the day of announcement of the event and the days preceding and succeeding the announcement day, which are numerically expressed as -1, 0 and +1. The period of data used for estimation of parameters is known as an estimation window. The estimation window in this study is identified from -230 days to -31 days before the announcement date i.e. "0" day.

In an event study like this the abnormal returns arising during the time of the event window and the abnormal returns arising in the periods around the event window must to be examined. The abnormal returns occurring in an interval before the event window can show us whether the market participants anticipated the information contained in the event, while the abnormal returns in an interval after the event window can tell us whether the market over- or under-reacts to the announcement of a particular event.

In the present research the investigation window is an extension of the event windows, from -30 days through +30 days, -20 days through +20 days, -10 days through +10 days and finally -5 days through +5 days for all the three corporate events. It is already mentioned in section 1.4 regarding the market-and-risk adjusted simple daily abnormal returns estimation, the same method is adopted in the present study. The daily abnormal return is calculated as follows:

$$AR_{it} = R_{it} - R^*_{it}$$

Where, AR_{it} : Abnormal return of i th firm for time period t ; R_{it} : Actual return of i th firm for time period t ; and R^*_{it} : Normal return of i th firm for time period t .

$$\text{Furthermore, } R^*_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it}$$

Where, α : Intercept term, β_i : Systematic risk of i th firm, R_{mt} : Actual return of market for time period t , and ϵ_{it} : Error term, with $E\{\epsilon_{it}\} = 0$.

Denoting the event date as day "0", regression coefficients are estimated over a period of 200 days, from -230 days to -31 days from the event date for -31 to +31 days

investigation window. The same method is also followed for other investigation windows like -20 to +20 days, -15 to +15 days, -10 to +10 days and -5 to +5 days. To test the statistical significance of results pertaining to abnormal returns obtained, the t-test recommended by Brown and Warner (1985) in the presence of event clustering of cross-sectional correlation is conducted.

In order to see if the events affect liquidity of the security, a simple paired t-test is used in the study. Total volume traded in the market is taken as the proxy for liquidity of the stock. The author has also made an attempt to see whether there is any significant difference in the total traded volume in the pre and post event dates of the three events (bonus issues, stock split and rights issues) for the estimation window of -30 to +30 days.

Result Analysis

This result analysis section is presented in two subsections. First deals with the results obtained for testing efficiency of the market with respect to the three events and the second enumerates the findings of liquidity in pre and post of these events.

Market Efficiency

Table 9 to 12 represents results in view of rights issue for all the four event windows proposed in the study. It is established that in -30 to +30 days window, there are 8 out of 61 days have significant abnormal returns and the abnormal returns are positively significant prior to day "0" of the event. In case of -20 to +20 days window, 8 out of 41 days exhibit significant abnormal returns, which show that there is not major movement in the distant days of the event. On the other hand for -10 to +10 days window, 6 out of 21 days show a significant abnormal return. At last in -5 to +5 days window, 2 out of the 11 observations illustrate a significant negative abnormal return, which communicates a correction happening in the market.

(Refer Table 1 to 4 here)

Liquidity Results

Table 4 shows the results achieved as part of testing the change in liquidity of the securities pre and post the events.

Table 4 embodies the outcome achieved with respect

to rights issue for the -30 to +30 days window. The “t” statistics found to be -0.22 and the corresponding probability of around 0.82. Therefore the possibility of committing a type 1 error if the null is rejected is 82%, which is not satisfactory. It is thus no evidence to reject the null hypothesis. As a result it can be concluded that there is no change in liquidity pre and post rights issue in the Indian market.

(Refer Table 5 here)

Finding and Conclusion

The Indian market is found to exhibit a semi-strong form of efficiency for rights issues as corporate events. Even though in few cases found where the market shows abnormal positive gains with respect to one event. In regards to rights issues, it can be believed that there is a possibility of leakage of information. For rights issues there is no evidence find to reject the null hypothesis of no difference of liquidity in pre and post event. In the overall study it is observed that there are less number of days which show significant abnormal returns in case of rights issues as compared to bonus issues and stock splits.

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Table 1: Event- Rights Issue (Estimation Window -30 days to +30 days)

Days	Mean Abnormal Return	No of Observations	T Statistics	Days	Mean Abnormal Return	No of Observations	T Statistics
-30	0.0053	104	1.4980	1	-0.0017	103	-0.4008
-29	0.0061	104	1.2153	2	0.0061	103	0.9309
-28	0.0026	104	0.6554	3	-0.0049	103	-1.4186
-27	-0.0018	104	-0.4441	4	0.0008	103	0.1909
-26	0.0040	105	1.0556	5	-0.0051	103	-1.7704
-25	0.0052	105	1.5486	6	-0.0097	103	-2.5972
-24	0.0050	105	1.1122	7	-0.0111	103	-3.2352
-23	-0.0022	105	-0.6425	8	0.00002	103	0.0049
-22	-0.0022	105	-0.8201	9	0.00003	103	0.0097
-21	-0.0010	105	-0.2915	10	-0.0106	103	-3.3246
-20	-0.0024	105	-0.6682	11	0.0007	103	0.2256
-19	-0.0014	105	-0.3722	12	0.000002	103	0.0003
-18	-0.0033	105	-1.1538	13	-0.0013	102	-0.4569
-17	0.0101	105	2.3969	14	-0.0014	102	-0.3986
-16	-0.0027	105	-0.9078	15	0.0017	102	0.5266
-15	-0.0020	105	-0.5401	16	-0.0025	102	-0.8295
-14	0.0022	105	0.4574	17	0.0087	102	2.2783
-13	-0.0057	105	-1.8239	18	0.0025	102	0.7319
-12	-0.0062	105	-1.8694	19	-0.0050	102	-1.4768
-11	-0.0007	105	-0.1773	20	0.0004	101	0.0983
-10	-0.0051	105	-1.2834	21	0.0056	101	1.7946
-9	0.0032	105	0.8505	22	-0.0046	101	-1.7648
-8	-0.0017	105	-0.3126	23	-0.0059	101	-1.8016
-7	-0.0029	105	-0.8729	24	-0.0008	101	-0.2308
-6	0.0124	105	3.6461	25	-0.0004	101	-0.0944
-5	0.0071	105	1.6776	26	0.0070	101	1.8198
-4	0.0034	105	0.7719	27	-0.00008	101	-0.0338
-3	0.0138	105	2.1569	28	-0.0015	101	-0.4374
-2	0.0035	105	0.9115	29	-0.0054	101	-1.7949
-1	-0.0018	105	-0.5556	30	-0.0042	101	-1.2236
0	0.0100	103	2.0003				

Table 2: Event- Rights Issue (Estimation Window -20 days to +20 days)

Days	Mean Abnormal Return	No of Observations	T Statistics	Days	Mean Abnormal Return	No of Observations	T Statistics
-20	-0.0024	105	-0.6682	1	-0.0017	103	-0.4008
-19	-0.0014	105	-0.3722	2	0.0061	103	0.9309
-18	-0.0033	105	-1.1538	3	-0.0049	103	-1.4186
-17	0.0101	105	2.3969	4	0.0008	103	0.1909
-16	-0.0027	105	-0.9078	5	-0.0051	103	-1.7704
-15	-0.0019	105	-0.5401	6	-0.0097	103	-2.5972
-14	0.0022	105	0.4574	7	-0.0111	103	-3.2352
-13	-0.0057	105	-1.8239	8	0.00002	103	0.0049
-12	-0.0062	105	-1.8694	9	0.00003	103	0.0097
-11	-0.0007	105	-0.1773	10	-0.0106	103	-3.3246
-10	-0.0051	105	-1.2834	11	0.0007	103	0.2256
-9	0.0032	105	0.8505	12	0.000002	103	0.0003
-8	-0.0017	105	-0.3126	13	-0.0013	102	-0.4569
-7	-0.0029	105	-0.8729	14	-0.0014	102	-0.3986
-6	0.0124	105	3.6461	15	0.0017	102	0.5266
-5	0.0071	105	1.6776	16	-0.0025	102	-0.8295
-4	0.0034	105	0.7719	17	0.0087	102	2.2783
-3	0.0138	105	2.1569	18	0.0025	102	0.7319
-2	0.0035	105	0.9115	19	-0.0050	102	-1.4768
-1	-0.0018	105	-0.5556	20	0.0004	101	0.0983
0	0.0100	103	2.0003	21	0.0056	101	1.7946

Table 3: Event Rights Issue (Estimation Window -10 days to +10 days)

Days	Mean Abnormal Return	No of Observations	T Statistics	Days	Mean Abnormal Return	No of Observations	T Statistics
-10	-0.0051	105	-1.2834	1	-0.0017	103	-0.4008
-9	0.0032	105	0.8505	2	0.0061	103	0.9309
-8	-0.0017	105	-0.3126	3	-0.0049	103	-1.4186
-7	-0.0029	105	-0.8729	4	0.0008	103	0.1909
-6	0.0124	105	3.6461	5	-0.0051	103	-1.7704

-5	0.0071	105	1.6776	6	-0.0097	103	-2.5972
-4	0.0034	105	0.7719	7	-0.0111	103	-3.2352
-3	0.0138	105	2.1569	8	0.00002	103	0.0049
-2	0.0035	105	0.9115	9	0.00004	103	0.0097
-1	-0.0018	105	-0.5556	10	-0.0106	103	-3.3246
0	0.01003	103	2.0003				

Table 4: Event- Rights Issue (Estimation Window -5 days to +5 days)

Days	Mean Abnormal Return	No of Observations	T Statistics	Days	Mean Abnormal Return	No of Observations	T Statistics
-5	0.007069	105	1.67757	1	-0.001681	103	-0.4008
-4	0.003398	105	0.7719	2	0.006063	103	0.93088
-3	0.01377	105	2.15699	3	-0.004942	103	-1.41858
-2	0.003527	105	0.9115	4	0.000772	103	0.19088
-1	-0.00179	105	-0.55564	5	-0.005102	103	-1.77039
0	0.010031	103	2.00027				

Table 5: Liquidity Test, Rights Issues (Window -30 to + 30 days)

T-Test	
T-statistics Value	Probability
-0.22	.8267

Understanding how to Challenge the Pioneer Marketing Strategies.

Dr. Jaspreet Kaur*

Abstract:

Pioneer advantage is one the most important competitive brand strategies which any company can undertake. The Pioneer Advantage could be said to be being first to enter an emerging market or trying to create a new market altogether. It is true that the late entrant is on the receiving end as it hasn't taken the first mover advantage. It is but possible to take advantage of the weaknesses of the pioneer and launch a product successfully in the market dominated by the pioneer. This research Paper analyses the major strategies which the entrant could implement to fight back the Pioneer brands in the market.

Keywords: *Pioneer Advantage, strategies*

Introduction

Pioneer advantage is one the most important competitive brand strategies which any company can undertake. The Pioneer Advantage could be said to be being first to enter an emerging market or trying to create a new market altogether.

Business history has shown that the pioneer companies have outsold the latecomers for years. The competitive advantages are crucial for the market pioneer. The best advantage with a pioneer is that it owns the product awareness. Also a lot of research has shown that the buyers do not recall all brands equally. It can thus be concluded that certain brands which have been pioneer in their product category will be recalled more than the other brands more easily. The Pioneer is most likely the highest profile of any brand in the category and, as a result, it is often recalled first. For example "Dettol" in the antiseptic products segment and "Maggi" in the 2 minute noodles segment.

Review of Literature:

In a research done by Schnaars (1994) ,it has been shown that the late comers have overtaken pioneers in various markets like personal computers, cameras and light beer. Although pioneers have the benefit of the first mover advantage but in reality, however, entering late has been seen to be a more common phenomenon as only

one company can be the pioneer in any product market (Schnaars 1994). Sometimes being a late entrants is the only realistic option for some businesses. The same is seen more in the developing countries which is looking at opportunities in the international market (Cho, Kim, and Rhee 1998).

Becoming a category pioneer also brings in a buzz and awareness. One could thus see an excitement and newness when the brand becomes a pioneer brand. Also when the next version of the product or service comes up in the market, the same gets compared to the pioneer. Here the latecomer is viewed as out-dated. It thus becomes very difficult for the latecomer to justify the same. The pioneer thus has the opportunity to create a branding strategy which will be difficult for the latecomers to attack. In case the latecomer is forced to adopt the "I am the same, except for price" position, then also they would have given the pioneer, the leader's position in the marketplace. Thus whether the product has a high likenesses or not in a particular product category, the "I am the same" products will have to go through a comparison as the attention has all been received by the pioneer brand at an early stage. (Aaker, David A and George S Day (1986). Thus the pioneer has the advantage of the "Unique positioning", and the creation of the loyal customers, and the creation of a brand which does not have any competitor noise. Thus the biggest advantage of the same would be, that the brand can setup itself, for a long and profitable run and remains a market pioneer. (Aaker, David A and George S Day (1986).

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Research Methodology:

The research design is Descriptive and the research done in this paper is purely based on secondary data related to the industry. The analysis has been based on the past trends of the industry for analysing the pioneer failures and late mover's success.

Analysis And Findings:

The analysis of the data has been done through the study of the secondary data of the industry taken from various books and internet.

Pioneer Weakness Latecomers Strength:

Sometimes the pioneers' weakness becomes the latecomers' strength. Some of the way in which a pioneers' weakness could become a Late entrant's success have been explained below.

1. The imitation costs (for late entrants) are lower than innovation costs (by the pioneer companies), thus the late entrants could be able to free ride on a pioneering firm's investments in many areas like the technology development, product awareness, and market. The new digital technology may have changed the cost equation attached to the product which the present segment is not ready to pay. For Example Godrej Interio beds which are automatic beds for lifting the bed for convenience based storing operations. This is an ace example of a pioneer advantage of Godrej but with a very high cost as compared to the present product in the market. The pioneer may be pricing premium segments just targeting selected segments .Thus the rest of the segments are available to the late comers.
2. The pioneer has a new product but does not offer a superior level of customer service. The same was the case with a new set of cabs coming to Delhi with the rate of 7.5 Rs per Km in comparison to Rs 14 per Km which was the normal rate of radio taxis in Delhi. The company but could not provide the appropriate service as the cab booking took a very long time. Also the numbers of booking the Taxi were engaged. Thus the other companies benefited from this weakness of the pioneer.
3. The pioneer comes up with a new product but does not support the same with a good distribution strategy. As is said some companies might come out with a new product and the same might not be available to the consumer at the various distribution channel points. This again could lead to the failure of the product. For example the failure of the much propagated "Flipkart Diwali Sale Bonanza" was contributed to the failure in managing logistics for the increased customers during Diwali. Another strategy could be to start distributing the product through new channels like the direct marketing which was done in the case of Lands' End catalogue or the Mary Kay cosmetics parties and also in the home-shopping-network channel which would help placing the product in the hands of more consumers.
4. The pioneer advantage will be nullified in case the consumer learning is limited which means that the pioneering advantage is likewise bound to be limited. The Consumer learning becomes very difficult in case the product is complex and technical. One example of this was that when picture phones were introduced in the late 1970's, the market did not respond very effectively to the same as it did not know how to find occasions to use the product. Till date many customers are unaware how to use the applications on an Apple 6S phone.
5. Another flaw in the pioneer's product could be when the attribute which has been brought in the market is not needed by the consumers at all. For example Lux came out with a chocolate flavour of soap which had massive adverting by Kareena Kappor. The question here is what does the chocolate flavour have to do with the usage benefits of the soap at all. Thus this move although a pioneer move was a massive failure.
6. The pioneering advantage could also be limited if the same is launched in a cluttered market. Here as the consumers have a lot of options of available brands, thus the consumers react by becoming confused.

Also the incumbent inertia could also show the ability of the pioneers to respond to environmental change or competitive threats. This incumbent inertia could lead to the rational and profit-maximizing response which could bring in organizational inflexibility in case the firm is locked in the specific set of assets and cannot cannibalize

existing product lines.

How Can The Late Mover Beat The Pioneer :

Here the challenge would be to devise strategies for the late entrants in the industries. For the same one will have to judge the market well along with the pioneer's limitations. It has been seen in some geographic areas, that pioneers have lost market-share advantage very fast. The same could happen because:

1. The late entrant could differentiate itself substantially in the minds of the consumers. This could be done by a distinctive positioning which can be accomplished through substantial changes which can be done with the help of new product or promotion strategies. One such example could be the Chrysler Corporation which redefined perceptions of its minivans with the introduction of Caravan, a two-door van. With this the pioneer in the market, the Ford Corporation's Windstar, which was then seen as a marquee van, lost its share to Caravan. It is at this point that General Motors Corporation repositioned Oldsmobile and changed its product and the advertising copy. The new copy was luring the consumers over 30 years old, positioning the car, with the help of the younger professional woman with a voice-over which was that : "This car is not only for your father's generation, but it's for you too."
2. The late entrants could discover creative ways which could increase the product trial. It is true that the market-share advantage for the early entrants is because of the higher trial penetration. In case the later entrant could also generate greater trial market share, then the same can overcome this disadvantages. Sample-product trial could be taken to be an appropriate mechanism. Like the same could be done in the consumer goods, in which the consumers could be supplied with a sample product for trial. In case the product is non-consumer goods, then the same could be done through the creative mechanisms. Limited demonstration of usage or prototypes is present in some product like software products, but at the same time test usage is possible in many an automobiles.
3. The late entrant could segment the market, stressing on a mini segment to target. This mini segment could then be given appropriate value, and the later entrant can extract additional rents. One such example would be the competition among the International Business Machines Corporation, Compaq Computer and Dell Computer in the personal-computer market. The later entrants here positioned itself as the variety enhancers, than just replacements or substitutes for the pioneers. Another strategic option which can be taken up by later entrant is micro-segmenting the customer base which is targeting high-value customers who could be able to pay a higher price for the product as compared to the cost incurred in catering to that segment. For example, the competitive-access providers (now Competitive Local Exchange Carriers, or CLECS), in order to provide local telecommunications services, basically skimmed the best customers of the regional Bell operating companies by offering a lower price. The same is possible for the regional companies who have taken in the average price scheme which is somewhat dictated by the Federal Communications Commission.
4. The late entrant could attack the high-growth markets specially when there is a significant shift in the industry. These shifts could be due to changes in regulation, and technological breakthroughs which could improve the product and also enhance the process of manufacturing and delivering the product. One such example could be the success of MCI's when it started penetrating the long-distance market and winning a regulatory battle with the AT&T Corporation.
5. The late entrants could also enter the market with a significantly better technology. The late entrants could exploit the technological discontinuities which could overtake the pioneers. Innovative late entrants could revolutionize existing industries with the introduction of new products and processes, and convert themselves into first movers in the next technological phase (Scherer 1980). Here the technological innovation will give the company an edge for only a time, as the incumbents catch on fairly quickly. For example, I.B.M., a later entrant to the personal computer market, captured the lead in the 1980's by developing the technology and using its powerful marketing engine. At the same time companies like Compaq and Dell fundamentally redefined the business. Compaq reduced the cost by changing the manufacturing process and having superior logistics. Dell, in addition

to using an efficient manufacturing process and superb logistics, invented the mail-order or direct channel to access end users, who by now were comfortable with personal computer technology. I.B.M. was not able to react to these changes fast enough and lost its lead in the 1990's.

6. The late entrant could Reduce price so that one could penetrate into an existing market. Thus what the latecomer has to do is to introduce a product at a lower price as compared to the pioneer's. This could then induce the pioneer's current customers to switch. This strategy however would lead to reduced margins for the latecomer in comparison to the pioneer in the market. For the same the latecomer will have to reduce the cost of production. The same could then be adopted by both the incumbents and pioneers.
7. The late comer could Improve a product or service, so that one could make it a niche market. Companies which come late could fight back the pioneer by being innovative and adding another feature to the presently existing product. This innovation may be radical or incremental. For example the latecomer could look at the incremental innovation which could be an enhanced version of an existing product. This enhanced product then can compete with the pioneers' existing products, and thus can be positioned to attract a smaller segment which is present in the existing market. Not only will this improved product or service pull the customers of the pioneer, but will also attract new customers which are not yet in the current target for the existing product or service. Like for example the potential satellite-based wireless service providers are currently offering a new feature called global coverage. This service could complement and replace options available to current customers. The main segment of potential players in the marketplace are traveling professionals who have to be in constant touch or the rural market executives in which the cost-to-provision telecommunications infrastructure is very high and satellite-based options help governments offer ubiquitous telecommunications services. In this service the telecommunications market is expanded, and can bring in additional revenue.
8. The late entrant could target the shifts in consumer needs which create opportunities for late entrants so that they could deliver customer values in comparison

to pioneers. The same could be based on the principle that, the market is usually not very well formed at the beginning when a new product comes to the market. This means that the early adopters will be very different from the later adopters who will be targeted by the late entrants (example personal computer industry). Market change and consumer-need shifts could thus be great opportunities for late entrants .

Examples of Late Mover Success:

One example of an ace late entrant success story is the ulcer-relief drug Zantac. Zantac was superior to the pioneer ulcer drug brand Glaxo in important ways that it had fewer side effects. This was in spite of the fact that the leader brand Glaxo began selling in the early 1980s. A few years later, Zantac was the best-selling prescription drug in the world.

An example is Orange, the late-entry cellular service provider in Britain, which successfully nudged aside the pioneers. Orange made a late entry into the market 30 months after the first entrant, Vodafone, and nine months after One-2-One, and with technology similar to One-2-One's. Orange, but was very aggressive in its entry strategy. It invested strategically in the network in the introduction phase of the service and also had an aggressive pricing strategies. Orange took over a third of Britain's total market's first quarter 1996 growth when it started offering about a 30 percent savings to end users in comparison to the companies Vodafone and Cellnet. The pricing strategy was so aggressive that the same could then compensate for Orange's poor network coverage. Fighting back the company's pricing strategy, the pioneers Vodafone and Cellnet had to lower the price differentials in key segments. Thus Orange managed to make it as a late comer with its aggressive pricing tactics, network infrastructure and innovative marketing tactics like the aggressive advertising and creative service bundling which then made Orange a credible player.

Other well-known brands have followed a similar path. Boeing did not pioneer modern jet travel, nor Google the Internet search engine. Yet both companies are now industry leaders.

Different markets need different strategies. Where aggressive pricing worked for Orange in Britain, the same might not work for new entrants in Scandinavia. In such

a business environment the monopolies are not driven by profits from the wireless industries, and thus the main source of differentiation for new entrants could be the creative marketing, innovative advertising, and a good customer service.

Conclusions of the Research

Despite the fact that there is a huge advantage in being first, the company could loose in the blink of an eye, in case the product is overpriced or service and technology is lagging. Aggressive competitors would have a vast array of weapons which could knock one down.

It is true that the strategic planners, are trying to create value by cutting costs and passing on the benefits to the consumers in their innovative products.

The past research shows that the being first to the market does have a crucial impact and brings in a sustained market-share advantage in comparison to the later entrants. At the same time the later entrants could succeed by adopting distinctive positioning and marketing strategies. Pioneers in most industries, do become powerful once they have reached the status of incumbent. They could but become complacent not trying to grow or shift as per the demands of the marketplace. It is true that the pioneer takes advantage of gaps in the offerings of the aging pioneers. The pioneer has the task to find the innovative ways to market their product or service.

Pioneers who have a distinctive presence in the marketplace have to be in a position to react, and judge the potential entrants. This will increase the barriers to their entry.

In case the pioneer is in a position to reduce its price or can block entrance by controlling key distribution channels, then the same could give the company a better advantages.

Becoming a pioneer after late entry will have to have a thorough understanding of the entry and defensive strategies available. Also they have to have a judgement of timing and a game plan for decision-making.

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Pygmalion Effect: An Innovative Tool To Increase Motivation

Dr. Shaily Saxena*

Abstract:

Motivation has long been a subject of interest to researchers and practitioners seeking to understand human behavior and performance. Over the course of the 20th century and into the new millennium, researches have been undertaken and theories been developed by accumulating large bodies of applied research investigating motivation across a variety of settings. The extent to which the Pygmalion effect occurs in a work organization was investigated. In this study, the relationship between a supervisor's expectations of a subordinate and the subordinate's resulting performance thereafter has been investigated. Also the research aims to identify other connected variables that play an important role in influencing behavior of the employees. The discussion is used to summarize the results and contemplate on various theoretical implications.

Keywords: *Pygmalion Effect, Motivation, Work Organisation.*

Introduction

Expectation is a powerful belief which affects two types of people i.e. the boss who sets expectations and the employee for whom the expectation is set. Therefore it becomes very crucial to ensure that expectations are positive in nature. The paper tries to focus on the concept of Pygmalion effect which can be understood as the phenomenon in which people, often children or students and employees, tend to perform according to the expectations placed upon them. The effect is named after Pygmalion, a play by George Bernard Shaw. The study is undertaken to identify the relationship between expectations of the superior and the productivity of the subordinate. The study also makes an attempt to apply Pygmalion effect in the workplace.

The role of expectation is crucial in today's organizational setting. The communication with the employees could have a drastic impact on how the employee behaves and how he performs. This communication might not just be verbal but could be through gestures, tone and approach. Thus Directors and Managers also play a crucial part in the success or failure of the employees although they might not realize it.

Objectives of the Research

The major objectives of the research have been listed below:

- To understand the concept of Pygmalion effect in today's working environment.
- To understand the effect of Pygmalion effect on the Self Fulfilling Prophecy
- To analyze how the manager could use the Pygmalion effect as an effective motivational tool for enhancing the employee performance.
- To judge how the superior could adapt his communication as per the expectation of the organization and employee capability

Review of Literature

Robert Rosenthal defined the Pygmalion effect as "the phenomenon whereby one person's expectation for another person's behavior comes to serve as a self-fulfilling prophecy" (American Psychologist 58.3 [November 2003], p. 839).

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A meta-analysis of leadership interventions revealed that the Pygmalion effect had the largest impact on improving leadership and organizational outcomes, such as follower job performance (Avolio, Reichard, Hannah, Walumbwa, & Chan, 2009). The Pygmalion effect is a special case of the self-fulfilling prophecy, whereby raising leaders' performance expectations for their followers improves follower performance (e.g., Rosenthal, 1993). Hundreds of studies and corresponding meta-analytic results demonstrate that the Pygmalion effect is a well-substantiated and important phenomenon (e.g., Eden, 1993; Harris & Rosenthal, 1985; Kierein & Gold, 2000; McNatt, 2000; Rosenthal, 2002; Rosenthal & Rubin, 1978). The Pygmalion phenomenon explains the leader-follower relationships. The "leader" here has been referred to as the manager or supervisor, an athletic coach, a military commander or an instructor. It has been explained that when the leaders' expectations of their followers' are raised, the followers start behaving in a similar way as the employees, athletes, soldiers, or trainees, to perform better.

In most work settings, however, leaders' expectations for their followers' performance occur naturally, without experimental manipulation (e.g., Eden et al., 2000; Kierein & Gold, 2000; McNatt, 2000), it is an important phenomenon that likely occurs routinely in organizations (D. Eden, personal communication, August 9, 2010). In the current study, we examine naturally occurring Pygmalion effects in work settings. The Pygmalion effect could thus be concluded to be the interpersonal motivational phenomenon which stresses on a high leader expectations. The same could be conveyed to followers orally or nonverbally through the leader behavior. Thus in case the leader's expectations are high then the same will augment the followers' self-expectations and self-efficacy which is their belief in their ability to perform better. The same thus is crucial in boosting motivation and effort, and also enhancing the employee performance. This also enhances the performance and reinforces the leader's high expectations, which is an extension of the interpersonal exchange to an upward spiral of high expectations bringing in an enhanced performance and continuously maintaining the higher performance.

Research Methodology

This research focuses on the major aspects of the Pygmalion effect and its repercussions. The same

is a descriptive study of the topic Pygmalion effect. Relationships between high performance expectations that improve follower performance and employee performance were investigated. Results are based on workplace leader-follower dyads. Higher performance expectations, positive communication and relationship quality from leaders impacted follower performance directly. The study has been done through secondary research sources. The impact of the Pygmalion effect on the workforce in companies today has been thoroughly studied in this research.

Effect of Pygmalion Effect On SFP

A self-fulfilling prophecy is a prediction that directly or indirectly causes it to become true, by the very terms of the prophecy itself, due to positive feedback between belief and behavior. Thus with the Pygmalion effect, the self-fulfilling prophecy (SFP) could become a self-sustaining prophecy. It is but seen that SFP could be said to be a double-edged sword as it could also be negative. This then becomes a new innovative technique of motivating the workforce. In contrast to the Pygmalion effect one could also list the negative Golem effect, where lowering manager expectations decelerates the subordinate performance and one could expect dumbbells from the followers.

The Pygmalion approach for management initiated with its effect on boosting the employee's performance on the basis of the cost-free investment of managerial mindfulness along with the communication of high expectations. This is achieved by managers implanting high expectations and counteracting any manifestations of the expected contrary expectations. There are four main principles to the Pygmalion Effect which can be identified as

- i. Expectation
- ii. Communicating the expectation
- iii. Adapting the Behavior to meet the expectation and
- iv. Making the expectation true.

Managers' Role in Pygmalion Effect

The Pygmalion effect has become crucial in today's workplace as the same could motivate the managers to get from their workers what they expect. In case a manager expects more, he will get more. At the same time the converse is also true, which is that the ones who expect less, get less. Thus this is a tool for the managers who

could play on the Pygmalion role by cultivating the high expectations to their subordinates and by supporting the subordinates high self-efficacy and high self-expectations. Thus the key word here would be the high expectations which cannot be just left to chance and have to be properly communicated by the Leader to his followers.

Interestingly, the Pygmalion in Management article explain that the “subordinates will not be motivated to reach high levels of productivity unless they consider the boss’s high expectations realistic and achievable. In case they are encouraged to strive for unattainable goals, then they will eventually give up trying and bring in results which are below their capability.”

The managers’ role in the implication of the Pygmalion effect is crucial as the employee has to adapt his performance to meet the expectations which have been benchmarked by his superior. Thus managers have to know the art of getting work done from their employees so that one could fulfill the organizational goals.

In some motivational theories although, it has been explained that tearing down part is psychologically harsh and could be harmful. The Pygmalion effect but explains the effects of both negative and positive reinforcement. People with strong wills and determination will strive to overcome criticism, but many will accept the badgering and succumb to what they assume to be their fate. Thus it is the role of the manger here to motivate an employee to get rid of the negative criticism and boost his morale with high expectations theme. The same should thus be replaced with praise and compliments which could lead the follower towards a positive goal will often bring in the expected results.

Conclusion

This study was guided by research on Pygmalion and expectancy effects, which have shown to influence employee performance. It was researched that engaging in Pygmalion-like behaviors produce messages characterized by high levels of social support and group potency, input, positive feedback and inclusion, in addition to low levels of ostracism and criticism. Conversely, it was further studied that high performing managers communicating expectations communicate messages conveying high team and leader standards, positive feedback, and accountability. Analyses revealed emergent patterns in both predicted

and opposite directions, but none that reached statistical significance. When examining the overall pattern of relationships, preliminary analyses indicate that employees who were high on performance reported receiving and experiencing more social encouragement, and lower instances of criticism. Interpersonally warm atmospheres characterized by supportive, inclusive and efficacious climate are essential for high levels of individual and unit performance (Stajkovic et al., 2009). For example, social support, a general positive atmosphere with messages of friendliness and warmth directed at the individual (Jablin, 2001; Redding, 1972), group potency, a consistent positive outlook concerning group outcomes (Campion et al., 1993), limited criticism, few instances of unfair criticism (Harris & Rosenthal, 1985), and scant ostracism, being ignored by others in the workplace (Ferris et al., 2008), contribute to constructive work environments. The socially constructed climate in high performing organisations is in line with Rosenthal’s (1973; Harris & Rosenthal, 1985) conceptualization of environments as conducive to individual development and with those reported by other researchers (Jablin, 1987, 2001; Van Maanen & Schein, 1979). Accountability, a lack of indifference about members failing to meet work objectives (Jones, 1984), and high team expectations, strong peer goal emphasis, are fundamental elements in establishing and enforcing expectations (Barker, 1993; Gibson & Papa, 2000; Locke, 2004; Shaw, 2004).

On the basis of the research it was concluded that one way of communicating with the employees is the performance appraisals. Some other major methods could be adapted by the managers to bring in a high expectation among the employees:

1. **Right hiring:** employees should be hired for jobs which can get form them their full potential. For the same the right people should be placed at the right jobs so that the same could lead to the progress of the organization. It is thus crucial that the job fit has to be executed with an eye to the future. The employee should not be hired for a job which is below their ability .The same can thus frustrate them and also limit their ability to perform to their maximum potential. Also at the same time placing an employee to a job for which they’re not yet suited could also lead to a frustration among them and also brings in failure in major tasks.

2. **Setting the stretch goals.** It is true that in today's world, every organization is looking at optimal utilization of resources. For the same they try and stretch the goals to unbearable level for the employees. The stretch goals for individuals which are beyond their current achievements will further frustrate them. Thus the stretch goals should be reasonable to attain. At the same time if the expectation is set too low, then the organization will be allowing them to perform below their ability.
3. **Set a benchmark of expectations:** The managers and business leaders have to learn to measure which is important in achieving their goals. For the same one has to set the clear expectations which are a critical component of this equation.
4. **Get constructive feedback.** A constructive feedback can be taken from coaching culture. It is crucial to talk to the employees about their performance, and in the course of action praising them and giving them constructive feedback. An additional guidance, mentoring, or training could help the employee to perform better. Constructive comments and helpful words of encouragement have a better chance of enhancing the performance of the employee beyond their current level.
5. **Train the leaders about the Pygmalion Effect.** Studies through a recent meta-analysis show that the Pygmalion leadership training has been seen to be most effective leadership development intervention. Thus the managerial executive team has to be made aware of the Pygmalion Effect, and have to be encouraged to expect the best from their teams.

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A Study on E- Healthcare: A Boon or Bane for Medical Fraternity

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Abstract:

The term e-healthcare seems to serve as “buzzword” which not only depicts the term “Internet medicine” but also the treatment and diagnosis through computers and related technology. The term is not much old and formulated by marketing leaders in consonance with other “e-words” such as e-commerce, e-business, e-solutions, e-education and many more. E-health is a novel method which helps in the distribution and dissemination of the information for health professionals, health providers and public. Internet has started to influence health sector to a large extent because of the support it provides in research and development activities (R & D). E- Health is not only confined with information but also the procedural part for diagnosis and treatment of the patients through software. The paper focuses on the benefits it offers to the doctors and what all are the possible problems that they might have faced with the introduction of e-health. The study is a primary research and the questionnaire is being filled by doctors in various hospitals of West Delhi.

Keywords: e-health, Buzzword, Internet medicines

Introduction

The use of information and communication technologies (ICT) for e-health is one of the most widely used areas in health today. The Internet is drastically and dynamically influencing the nation's growth and infrastructure by giving a new shape to many industries. It is incredibly impacting the relationships between buyers and sellers of goods and services. Health-related activities stand to benefit enormously from the Internet. The use of information and communication technologies (ICT) for health is one of the most rapidly growing areas in health today which we named as e-health. E-health provides a novel system for using the resources which are related to health - such as information, money, and medicines. E-health is nothing but the transfer of health resources and health care electronically. It encompasses three major areas: The delivery of health information, for health professionals and health consumers, through the Internet and telecommunications, Using the power of IT and e-commerce to improve public health services, e.g. through the education and training of health workers and the use of e-commerce and e-business practices in health systems management.

There is considerable epidemiological proof that

widespread espousal of specific behavior changes can considerably improve population health. Yet, health communication efforts, while well intentioned, have often failed to engage people to alter behavior within the complex contexts of their lives. 'e-health communication', health promotion efforts that are mediated by computers and other digital technologies, may have great potential to promote desired behavior changes through unique features such as mass customization, interactivity and convenience.

There is growing initial evidence that e-health communication can improve behavioral outcomes. Nevertheless, we have much to learn about whether the technical promise of e-health communication will be effective within the social reality of how diverse people communicate and change in the contemporary world. According to a report, over 39 million people in India are destitute of healthcare services. For this the Indian Industries need to come ahead and fund the government “The problem today is due to lack of health awareness and related programs, 70 percent of the women in rural parts of our country, are not aware of the benefits of breast feeding, which leads to various diseases in their child.”

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The various applications of health have helped a number of efforts to improve upon the nation's information infrastructure. These efforts will also provide test beds for improved evaluations of the benefits of different health applications of the Internet and their technical and non technical requirements. But these test beds and ultimately the Internet itself will not effectively support health applications unless a better understanding is developed of the technical capabilities that these applications demand.

Benefits

There is no doubt in saying that e- health provided many benefits to the citizens in many ways. Some of the benefits its offers are:

- Creation of awareness among the citizens
- Saves time
- Proper information of doctors and the schedule of hospitals
- Minimizes the cost of medicines as well treatment
- Utilization of resources of the hospitals

Objective of the Study

- To study the novel concept 'e-healthcare' and its significance in today's modern world.
- To study the various benefits its offers to Medical Fraternity"
- To study the ease which patients are enjoying due to the introduction of e-healthcare.
- To study the problems the doctors and patients are facing in using the applications related to e-healthcare.

Research Methodology

The methodology which is adopted to collect the data is through survey and is done with the help of a structured questionnaire. The population under consideration is the doctors working in west Delhi area. Convenience sampling was taken to determine the units of sample.

Research Design

The study is descriptive which delineate the data and its features. It is also known as statistical research. The study

is an attempt to find out the present status of e-healthcare services and the ease it provide to the medical fraternity.

Sampling Design

A sample of 50 respondents was collected using convenience sampling.

Data Collection Methods

Primary Data

The data collection was done through a structured questionnaire. The questionnaire was prepared keeping in mind the objectives and scope of the research. The attempt has been made to through the light on the overall impact of E-health care.

Secondary Data

Secondary data has been taken from the various journals, articles, internet and management books which are mentioned in the bibliography.

Sample Size

50 random respondents belonging to the profession of doctors, from various hospitals of West Delhi were selected to carry out the study and also some of the patients were interviewed to find out the benefits of e-healthcare to them.

Tools for Analysis

Statistical Tools like pie- charts and bar- diagrams were used to examine and analyse the data using. Microsoft Excel.

Finding and Analysis

The findings of the paper are as follows:

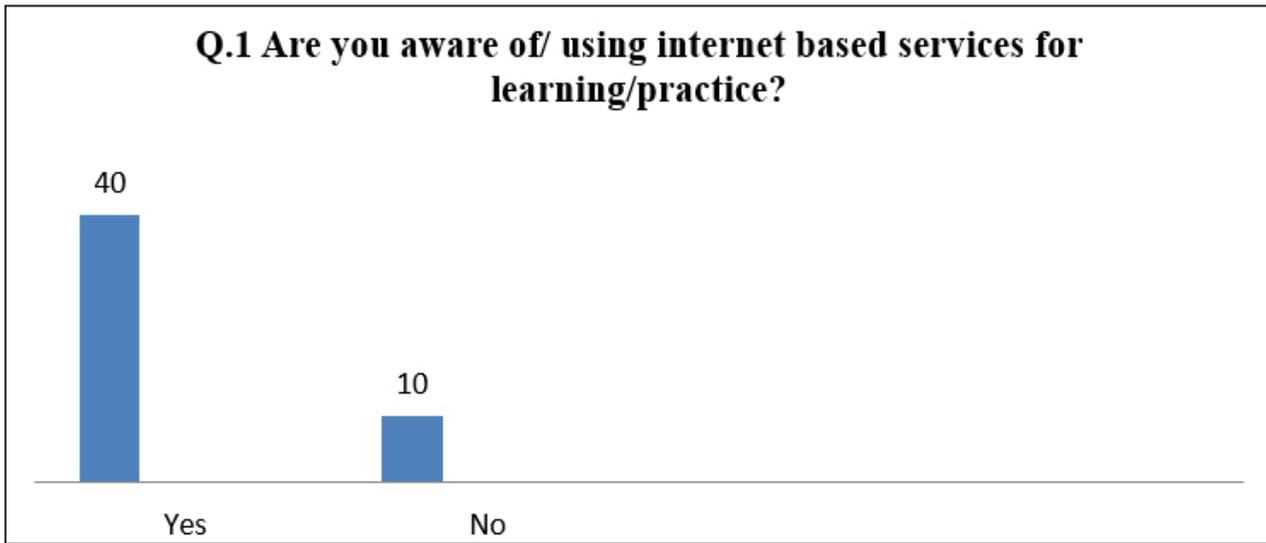


Figure: 1

Analysis: More than 80% of doctors use internet based services in their practices. Their dealings with patients include software of many types which are in

accordance of their problems. Still almost 20% of doctors are dependent on the books and doesn't feel comfortable using internet

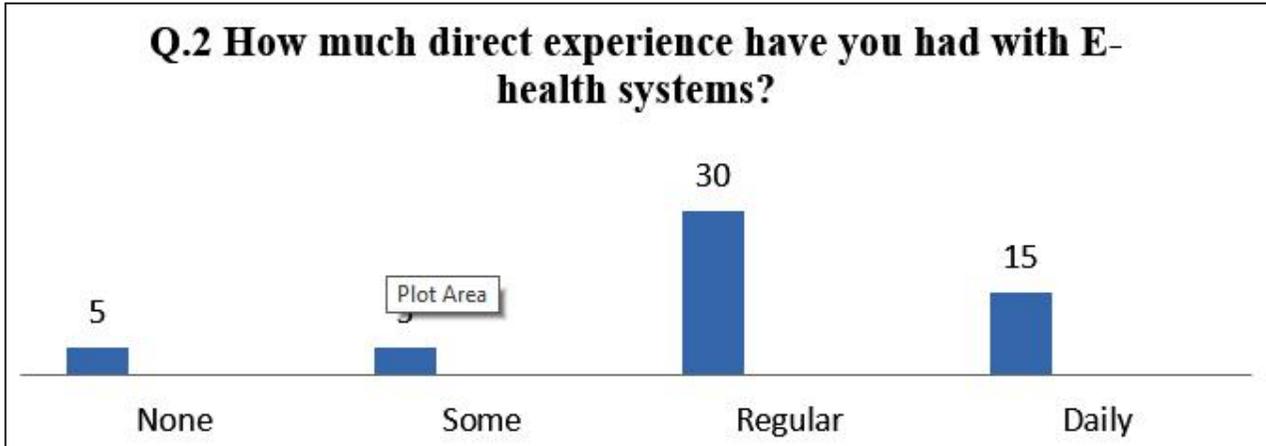


Figure: 2

Analysis: 60% of the doctors have a regular but not on daily basis direct experience of using E-health systems e.g. PMS (Patient management System).

Various other systems are used in Laboratory or in the diagnostic part on daily basis .Few of them use it on daily basis. A very few either uses it very rarely or doesn't use it at all.

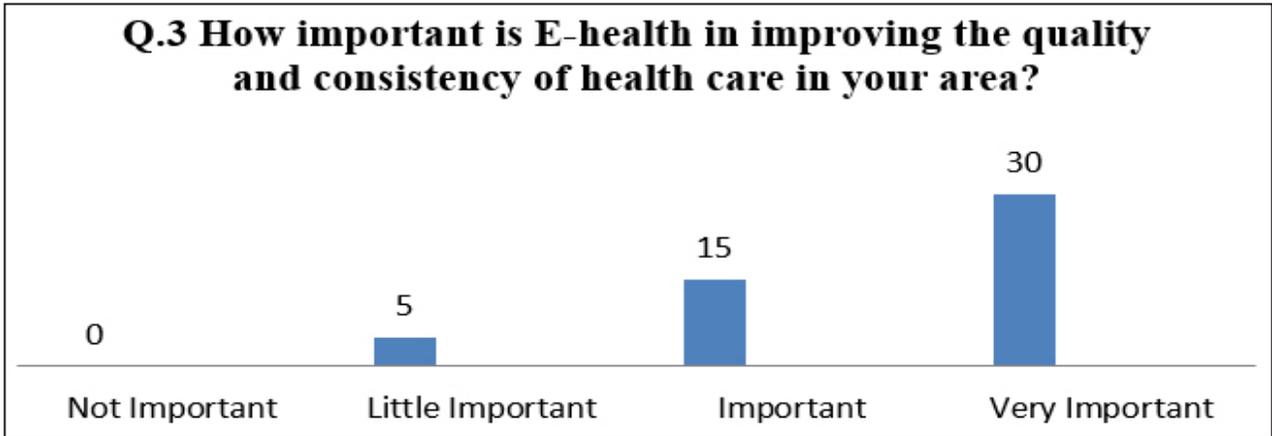


Figure: 3

Analysis: Majority of doctors agree to the fact that E-health is very important in improving the quality and consistency of health care in their respective areas. Still some of them feel about the little or no importance of internet based healthcare services.

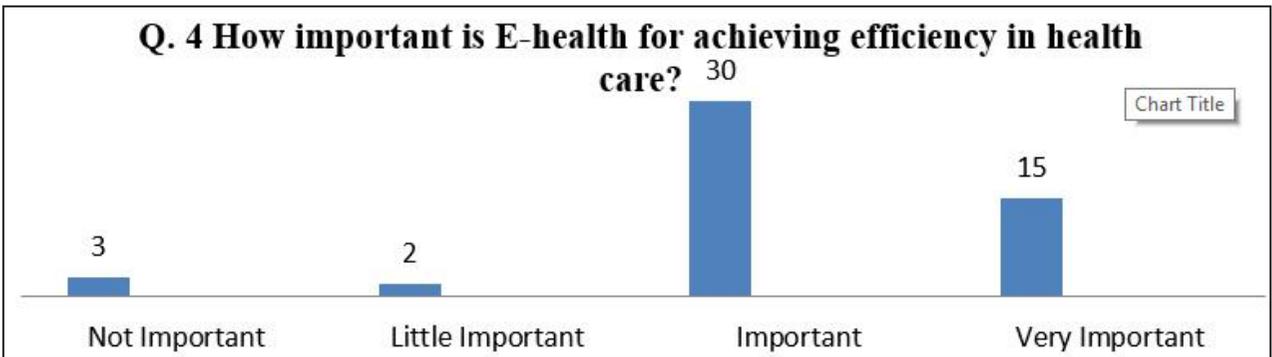


Figure: 4

Analysis: To achieve efficiency in healthcare industry major role while still some of them considers it as of very little importance or no importance. 60% agree that internet based services play

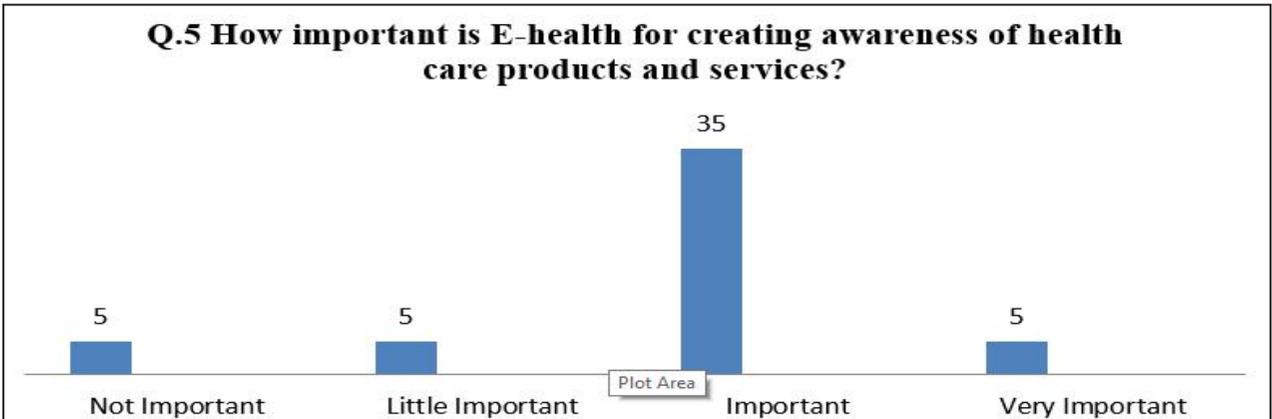


Figure: 5

Analysis: 70% of the doctors believe that internet is important and some of the doctors believe that internet is important for creating the awareness of healthcare products and services. While few think it to be very of no use

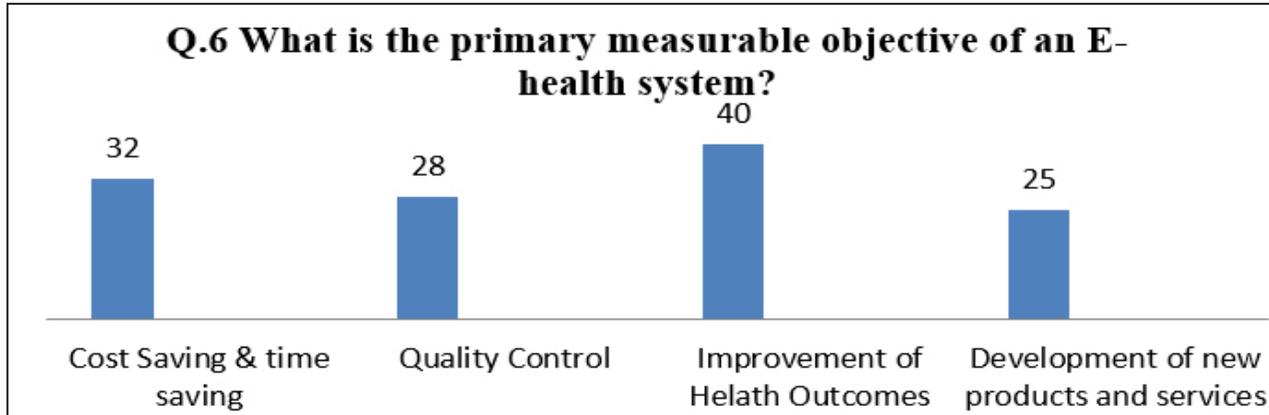


Figure: 6

Analysis: 80% doctors agree to the fact that internet helps in improvement of health outcomes. More than 60% are of the view that it helps in cost and time saving. 50% of them even believe that internet helps in development of new products and services and helps in quality control too.

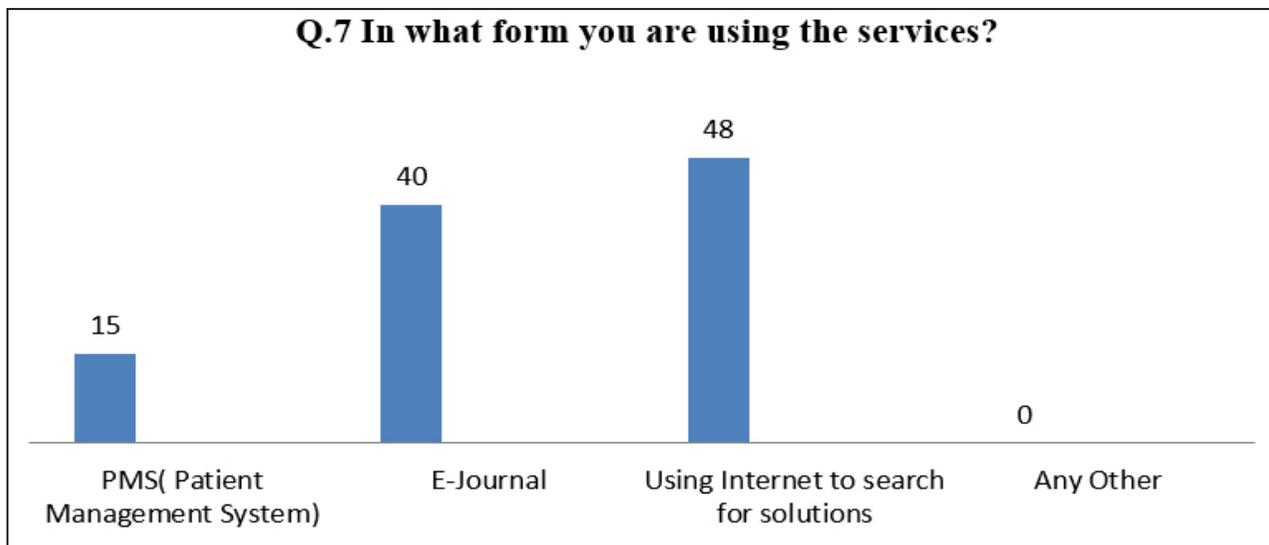


Figure: 7

Analysis: More than 90% doctors use internet to search for solutions. Majority of the group of doctors are also subscribed to various E-journals. PMS (Patient Management System) is yet another powerful tool in making the easier practice in case of Private practitioner.

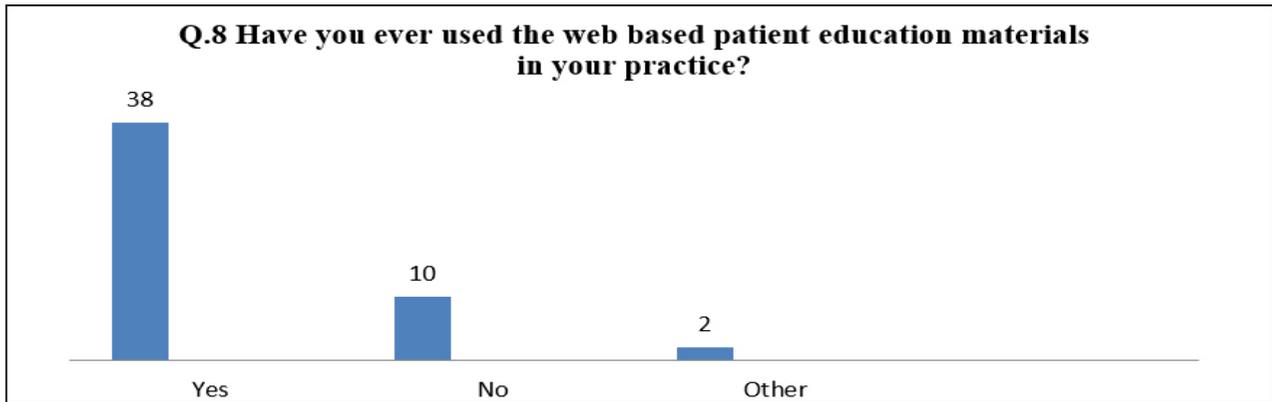


Figure: 8

Analysis: 76% doctors of the have used the web based patient education materials in their practice. 20% still are happy in the traditional type of practices and yet some other are of mixed opinion. 90% of the doctors give the score of 8 out of 10 for the use of technology in their practice. 70% are of the strong belief that with the introduction of E-healthcare services and internet based practices bring tremendous satisfaction to the patients. Some of the doctors don't think so. As per the survey conducted the patients have benefitted a lot from internet based practices. It helps in saving the time. Service is instant. Patients even get messages for vaccinations. Invaluable help is rendered to the doctors from the researches which are going on throughout the world instead of depending only on the books.

Conclusion

Internet has provided the answer and solution to all those problems which were hard to deal with just a few years back. Now, the researches taking place at different parts of the world are available to almost every doctor; who is of great importance not only in diagnosing but also in treating the patients. Various advanced technologies have been successful in treating complicated diseases. With the help of advancement in technologies, it has now been easier to conduct operations with ease. Private practitioner found it easier to manage the data of huge patient base. With the introduction of Patient Management System (PMS), the complication in handling the data of patients has been significantly reduced. During the survey, it was found that more than 80% of the doctors including private practitioner are happy with what internet has provided in their professional lives. Still, some of the doctors are of

different opinion. There are some doctors who believe in practicing in a traditional manner and they prefer to read journals instead of surfing the Internet for any problem in their practice. After the survey it has been concluded that internet based practices or E-healthcare has proven to be the Boon for the medical fraternity. Every invention including technological and web based, has a flip side to it, but then in front of its advantages they are negligible.

Limitation of the Study

The conclusion of the paper of is based on the data which is collected from West Delhi area. To research can further be done on the same considering the larger territory.

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Need of Criminalization of Patent Infringement

Aastha Bagga*

Abstract:

Property is an inevitable reality whose existence and need is unbeatable. With advancement in science and technology new form of property has emerged – the intellectual property, one that is result of intellect of a person. Patent is the most developing trend of intellectual property. Though there has been substantial development in patent law yet the fact remains that till date majority countries have not labeled patent infringement as an offense under criminal law. Patents though vent out crores of rupees are yet till date under the preview of civil laws. There has been considerable voices being raised to criminalize the whole patent regime, but they are often termed as “barking mad”. The paper analyses the need of criminalization of patents law for the maximum good of maximum number.

Property is an inevitable reality on which the existence of human life and form rests. Dynasties are raised and ruined on the pretext for either need or greed of property. Bentham's lines bring to light the paramount significance of property.

“Property and Law are born together,
and die together.

Before laws were made there was no property;
take away laws and property ceases”.

Bentham¹

Every age has witnessed man's affection for his property, though the types and kinds of property have gone through a morbid change. The foremost aim of a human is undoubtedly centred around property. Be it mythology, where the so called battle for Dharma in Kurukshetra, The Mahabharata or the technology where cyber space issues between countries arise, the world lives and grows around property concerns. The need or the greed of Homo Sapiens, whatever it may be, is property itself. In his Prince, Machiavelli (V. D. Mahajan, 2006) pointed out the extreme love of a man for his property in these words:

Men sooner forget the death of their father

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1 Morris R Cohen and Felix S Cohen, Readings in Jurisprudence and Legal Philosophy, Vol. 2, 817 (Beard Books, Washington DC, 2002).

than the loss of their patrimony”.²

Where the early man's property constituted only of his chattels and cattles, a contemporary man's property includes everything and anything under the sky that bears his legitimate or sometimes illegitimate stamp. It becomes amply clear and evident that each and every civilisation has felt the need of preservation of property and therefore there have been a simple to complex system of laws to preserve this fountain head of our existence -The Property.

Advancement in science and technology has brought about a sea of changes. A new form of property i.e. Intellectual Property has accrued on the socio-legal horizon. As the name suggests Intellectual Property is the rest of labour of mind unlike other forms of property that is result of man's physical sweat. Property can be divided broadly into tangible and intangible. Intellectual Property is the intangible form of property that cannot be seen or touched as other property goods like car, building, gold or anything alike. The concept of Intellectual Property is of recent advent and origin but a lot of advancement and evolution has also occurred in it. Intellectual property is a term referring to a number of distinct types of creations of the mind for which property rights are recognized—and the corresponding fields of law.

Property does not just comprise of tangible things like houses, cars, furniture, currency, investments etc and such assets are not the only kind that can be protected by

2 V. D. Mahajan, Political Theory, 389 (Sultan Chand and Company, New Delhi, 2006).

law. There are many other forms of intangible property known as intellectual property that have been recognized under the law and granted protection against infringement (Bhagwati Dan Charan, 2011) Trademark, copyright, geographical indication, patent, integrated circuits, are the various kinds of Intellectual property.

Patent can be defined as an intellectual property right that is granted by the Government of the of a country to an inventor which can be an individual or a group or corporation, with the sole right for the purpose of excluding others from making, using, offering for sale, selling or importing the invention in the country for a limited fixed duration in return to public disclosure of the invention made by the inventor. But in exchange for royalty payments a patent can be sold or permission may be given to use the patent in the invention. Patented inventions have, in fact, pervaded every aspect of human life, from electric lighting (patents held by Edison and Swan) and plastic (patents held by Baekeland), to ballpoint pens (patents held by Biro) and microprocessors (patents held by Intel, for example). All patent owners are obliged, in return for patent protection, to publicly disclose information on their invention in order to enrich the total body of technical knowledge in the world. Such an ever-increasing body of public knowledge promotes further creativity and innovation in others. In this way, patents provide not only protection for the owner but valuable information and inspiration for future generations of researchers and inventors (World Intellectual Property Organization).³ The patent holder is granted the exclusive right to make, use, and sell the patented innovation for a limited period of time.

The term patent emanated from Latin word 'Patere', which means "to lay open" (i.e. to make available for public inspection) and "more directly as a shortened version of the term 'letters patent', which originally, denoted an open for public reading royal decree granting exclusive rights to a person"⁴

There is another significance of patent as well. The patent gives the owner grounds to prevent infringement through legal means. Thus a patent cannot by itself stop someone from making or using an invention, but simply gives the patent owner the right to take the person to court if they do.

The four primary requirements for patentability are:

i. Patentable subject matter,

3 "What is Intellectual Property", available at <http://www.wipo.int/about-ip/en>.

4 "Definition of patent" available at <http://www.wipo.int/about-ip/en>.

- ii. Utility,
- iii. Novelty,
- iv. No obviousness or intentness

The concept of Patents is said to be a real old one. 500B.C. in Sybaris, Greece, there were monopolies granted to new dishes for a period of one year (Toshiko Takenaka, 2008). In 1474 Senate of Venice gave the first monopoly rights for 10 years. But the concept of Patents originated in England during the reign of Elizabeth I in 12th century and was completely developed by 14th century. Special privileges were given by crown to introducers of new technology to use their technology solely for a period sufficient for them to develop it and further train others to use it. It served two purposes, first being, the inventor could yield profit in the initial years, second; the state had the new technology.

Objectives of patent system (Israel Begashaw, 2010)

- i. To create favorable conditions in order to encourage local inventive and related activities thereby building up national technological capability.
- ii. To create and encourage the transfer and adoption of foreign technology by creating conducive environment to assist the nations development effort of the country
- iii. To fulfil the nation's multidimensional demand for a harmonious scientific and technological progress, to be used for the public benefits.

The salient features of Patents are:

- i. It is a limited monopoly right
- ii. The patent must be in respect of invention and not discovery.
- iii. In respect of one single invention there must be one single patent.
- iv. A patent may be in respect of a substance or in respect of a process.
- v. It encourages research and grants exclusive privileges to the inventors
- vi. But its not possible to bifurcate a patent and state that one relates to the substance and other to process.
- vii. In order to have a complete patent, the specifications

and the claims must be clearly and distinctly mentioned.

viii. It is the claims and claims alone which constitute the patent.

According to The U.S. Patent and Trademark Office (USPTO) there are three main types of patents:⁵

- i. Utility patents,
- ii. Design patents,
- iii. Plant patents.

Utility patents are the most common type of patents. As the name suggests they are for the utilitarian aspect that is the utility of the patent. These are given for the practicality, operation use, benefits and usefulness of the invention. Utility patents are issued for the invention of a new and useful invention, process, machine, manufacture, or composition of matter, or a new and useful improvement in existing machine or matter.

Design patent, as its name implies, is a patent on the aesthetic appearance or ornamentation of invention that already exists. A design patent is granted for an outward physical look of a patent. Design patents primarily contain drawings.

Plant patents are granted for the discovery or invention of newer plant that can be asexually reproduced.

In India Patents are covered by Indian Patents Act, 1970. The patent is renewed every year from the date of patent. The term of patent in India is 20 years

The patentable things in India (Patent In India) are:

Art, Process, Method or Manner of manufacture;

- i. Machine, Apparatus or other Articles;
- ii. Substances produced by Manufacturing
- iii. Computer Software which has Technical application to Industry or is used with Hardware
- iv. Product Patent for Food / Chemical / Medicines or Drugs

Not patentable things in India include the following:

- i. Frivolous or obvious inventions.

⁵ Available at <http://www.uspto.gov/web/offices/ac/ido/oeip/taf/pat-desc.htm>

ii. Inventions which could be contrary to law or morality or injurious to human, animal or plant life and health or to the environment.

iii. Mere discovery of the scientific principle or the formulation of an abstract theory or discovery of any living thing or non-living substances occurring in nature

iv. Mere discovery of any new property or mere new use for known substance or the mere use of a known process, machine or apparatus- unless results to new products or employs one new reactant.

v. Producing a new substance by mere admixtures of substances.

vi. Mere arrangement / rearrangement or duplication of known devices functioning Independently.

vii. Method of agriculture and horticulture

viii. Any process for the medicinal or surgical, curative prophylactic, diagnostic, therapeutic or other treatment of human beings, animals to render them free of disease or to increase their economic value or that of their products.

ix. The biological processes for production or propagation of plants and animals in whole or any part thereof other than micro-organisms but including seeds, varieties and species (new plant varieties can be protected by the protection of plant varieties and farmers act 2001)

x. A mathematical or business method or algorithms.

xi. A Computer Programme per se other than its technical application to industry or a combination with hardware.

xii. Aesthetic creation including cinematography and television production.

xiii. Method for performing mental act or playing game.

xiv. Presentation of information.

xv. Topography of Integrated Circuits.

xvi. Invention which in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known components.

xvii. Inventions relating to Atomic Energy.

According to Narula⁶ there are many problems with Intellectual Rights enforcement around the world generally and India particularly. These are:

- i. Lack of awareness and knowledge of IP laws among stakeholders.
- ii. 'Too little, too late' remains the problem with the enforcement agencies in India.
- iii. Lack of IP-trained and educated enforcement officers.
- iv. IP crimes not being treated as serious offences. Enforcement of IP rights is sometimes perceived as an encroachment on public rights by the media and public, making the judicial officers' work even more difficult.

Different countries have different legal regime for patent infringement. Broadly categorising there are two kinds of remedies for patent infringement:

- i. Civil remedies
- ii. Criminal remedies

A patent owner can bring a patent infringement action (lawsuit) in civil court against anyone who uses his invention without permission. The court will then grant a civil remedy by the following ways:

- (a) It may issue a court order (called an injunction) preventing the infringer from any further use or sale of the infringing device.

Or

- (b) Court may award damages to the patent owner.

Or the both of above

The court may also work with the parties to hammer out an agreement under which the infringing party will pay the patent owner royalties in exchange for permission to use the infringing device.

Bringing a patent infringement action is itself risky at the first place. The defendant always defends himself by proving in the court that the patent is really invalid or patent office made a mistake in issuing the patent in the first place. Thus the patent is found invalid and the lawsuit is dismissed, leaving the patent owner in a worse position

6 "India: IP CRIME: "Rising Threats To Intellectual Property Rights" available at <http://www.mondaq.com/india/x/321112/Trademark/IP+CRIME+Rising+Threats+To+Intellectual+Property+Rights>

than before the lawsuit. This is a genuine cause of lesser patent infringement law suits.

Generally civil cases are undertaken for patent infringement but China is the only country which grants 5 yrs imprisonment for infringement of patent and this may be the reason of its boost in economy. Patent infringement can already result in criminal prosecution in a number of countries namely, Mexico, Netherland, France, Brazil, Argentina, Austria, Switzerland, Italy, Japan, Sweden and Germany, although prosecutions occur once in blue moon.

Austrian Patent Act, Article 159 states:

- (1) Anyone who infringes a patent shall be condemned by the court to a fine of up to 360 times the per diem rate. Any person who commits such an act commercially shall be sentenced to detention not exceeding two years (Markus Gaderer, 2012).

In France Article L615-14 states that:

Any person who has knowingly infringed the rights of the owner of a patent shall be liable to a three-year imprisonment and a fine of € 300,000. Where the offence was committed by an organised criminal group or an online public communication network or concerning products dangerous to health of humans or animals, the penalties will be increased to a five-year imprisonment and a fine of € 500,000. Where as in Canada every person who infringes patent rights in some way is guilty of an indictable offence and liable to a fine not exceeding two hundred dollars or to imprisonment for a term not exceeding three months or to both.

Even in Norway intentional patent infringement is a crime punishable with fines or imprisonment up to three months (Moose, 2012) as per Norwegian Patent Act Section 57.

According to Article 273 of the Spanish Criminal Code (Candela Estévez, 2012):

1. Whoever, for industrial or commercial purposes, without the consent of the holder of a patent or utility model and being aware of registration thereof, manufactures, imports, possesses, uses, offers or markets objects protected by those rights shall be punished with a sentence of imprisonment of six months to two years and a fine from twelve to twenty-four months.
2. The same penalties shall be imposed upon whoever,

likewise and for the purposes stated, uses or offers the use of a patented procedure, or possesses, offers, markets or uses a product directly obtained by the patented procedure.

3. Whoever perpetrates any of the acts described in Section 1 of this Article when equal circumstances concur with regard to objects protected in favour of a third party by an industrial, artistic or topographic model or design of a semiconductor product shall be punished with the same penalties.

In Canada every person who [infringes patent rights in some way] is guilty of an indictable offence and liable to a fine not exceeding two hundred dollars or to imprisonment for a term not exceeding three months or to both (Roufousse T. Fairfly, 2012). In Belgium patent infringement is punishable if it occurs in an economic context, with malice or fraudulent intent (art. 8 act of 15 May 2007 concerning punishment of infringement and piracy of intellectual property rights). The punishment is 3 months to 3 years of imprisonment and/or a fine of 550 EUR to 550.000 EUR (Michaël Beck, 2012). It is a crime in ROMANIA as well, sanctioned with either imprisonment or a fine (Dragos M Vilau, 2012). In Germany patent infringement is a crime, punishable with up to 5 years imprisonment.

In Denmark intentional patent infringement is a crime punishable with fines or imprisonment up to 1½ year (Danish Patent Act Art. 57) OR up to 6 years (Penal Code art. 299 b) in aggravating circumstances (Hanne Kirk Deichmann, 2012). In Bulgaria, the only texts concerning criminal liability for infringement of patents are:

Criminal Code Article 173:

1. A person who publishes or uses under his own name or under a pen name the work of another person in the field of science, literature or arts or a considerable part thereof, shall be punished by deprivation of liberty for up to two years or by a fine from BGN one hundred to three hundred
2. By the same punishment shall also be punished the person who presents for registration or registers in his own name invention, workable model or industrial design of another person.

Article-174

A person who, by abusing his official position, gets himself included as a co-author of an invention, workable model or industrial design or of a work of science, literature or

arts, without having taken part in the creative work for its elaboration, shall be punished by deprivation of liberty for up to two years or by a fine from BGN one hundred to three hundred, as well as by public censure (Stoilov, 2012). In Hungary the Section 329/D. of the Criminal Code provides the following:

Violation of Industrial Design Rights

1. A person who violates the right of the holder of a patent, plant variety, certification of supplementary protection, trademark, geographical indication, design rights, utility models or topographies conferred on the basis of an act, promulgated international convention or Community legislation by imitating or copying the subject matter of protection, and thereby causing financial injury, is guilty of a misdemeanour punishable by imprisonment of up to two years.
2. The punishment for a felony shall be imprisonment for up to three years if the violation of industrial design rights:
 - (a) results in substantial financial injury;
 - (b) is committed in a pattern of business operation.
3. The punishment shall be:
 - (a) imprisonment of up to five years if the violation of industrial design rights results in particularly considerable financial injury;
 - (b) imprisonment between two to eight years if the violation of industrial design rights results in particularly substantial financial injury.

The Dutch Patent Act (Art. 79(1) and (2)) says that patent infringement is a criminal act. It is punishable with a fine and imprisonment. Up to six months imprisonment for a single fact of infringement and up to four years if the infringement takes a “professional form” (making a living out of it). As far as I know these articles have never been put to use though (Mark Groen, 2012). In Portugal patent infringement is also a criminal offence. According to Article 321 of the Portuguese Industrial Property Code:

Article-321 Violation of Patent Exclusively, the utility model or the Semiconductor -Topology

The following acts, carried out without the consent of the holder of the respective right, are punishable by a prison sentence of up to three years or a fine of up to three hundred

and sixty days:

- (a) Manufacture of artefacts or products that are covered by the patent, the utility model or the semiconductor topography;
- (b) Use or application of means or processes that are the object of the patent, the utility model or the semiconductor topography;
- (c) Import or distribution of products obtained through any of the aforementioned methods.

Article-324 Sale, Circulation or Concealment of Products or Articles

The act of selling, putting into circulation or concealing counterfeit products, produced by any of the means and in any of the conditions referred to in Articles 321 to 323, with knowledge of that situation, is punishable with a prison sentence of up to one year or a fine of up to 120 days.

Article-330 Disposal of Seized Items:

1. The objects manifesting a crime provided for in this code are forfeited in favour of the state, as well as the materials or instruments predominantly used in the practice of that crime, unless the offended holder of the respective right gives its express consent that said objects can once again enter the commercial circuits or that they are given another purpose.
2. Objects declared forfeited, as referred to in the preceding paragraph, are totally or partially destroyed whenever it is not possible to eliminate the part of them or the distinctive sign on them that constitutes violation of the right (Sandra Martins Pinto, 2012)

In the Czech Republic the Act no. 40/2009, the Criminal Code, in section 269 states that intentional infringement of patent (and other specified) rights can result in imprisonment for a period of up to 2 years. In cases of serious infringement the term of imprisonment can be as much as 8 years (damage caused exceeds 5 mill. CZK, about 200,000EUR). In Slovakia the Act no. 300/2005, The Criminal Code, in section 282 states that intentional patent infringement can be punished by imprisonment for a period of up to 3 years. This can rise to as much as 8 years if the damage caused exceeded 133,000EUR (Petr, 2012). In Finland, patent infringement may be a crime punishable by fines (cf Finnish Patent Act of 1967, as amended,

Section 57). However, the criminal statute is applicable only to intentional infringement and conditional on the patent holder request for its application.

There is a sectional cry among European Union as well to criminalise patent infringement. The debate over whether to criminalise patent regime was kicked off by inventor of clockwork radio, a British inventor, Trevor Baylis. He advances a very logical yet prone to criticism by various sections of society to the extent of calling it, "Barking mad" (Rob Jackson, 2010).

He said, "If I was to nick your car, which is worth £10,000, say, I could go to jail, But if I were to nick your patent, which is worth a million pounds, you'd have to sue me. And if I was a colossal company, or indeed another country, that had stolen your invention, how could you find a million pounds a day to take me to court?"

This proposal was vehemently criticised but an year later European Commission issued IPRED2 (Joren De Wachter, 2012) that is "Proposed directive on criminal measures aimed at ensuring the enforcement of intellectual property rights", IPRED2, but it was later removed due to other reasons. Its Article 3 read:

"Member States shall ensure that all intentional infringements of an intellectual property right on a commercial scale, and attempting, aiding or abetting and inciting such infringements, are treated as criminal offences."

So there is an inclination shifting towards criminalising of patents amidst the widespread criticism in Europe. Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) administered by World Trade Organization (WTO) in 1994 is also favouring criminalisation of patent regime. Article 61 of TRIPS (Article 61-TRIPS) reads as :

"Members shall provide for criminal procedures and penalties to be applied at least in cases of willful trademark counterfeiting or copyright piracy on a commercial scale. Remedies available shall include imprisonment and/ or monetary fines sufficient to provide a deterrent, consistently with the level of penalties applied for crimes of a corresponding gravity. In appropriate cases, remedies available shall also include the seizure, forfeiture and destruction of the infringing goods and of any materials and implements the predominant use of which has been in the commission of the offence. Members may provide for criminal procedures and penalties to be applied in other

cases of infringement of intellectual property rights, in particular where they are committed willfully and on a commercial scale.”

Through the very beginning there have been no criminal provisions for patent infringement. Its reason is rooted in its origin. The concept was originated and developed with the idea of helping development of industry rather than affording protection to the proprietary right of individual. The protection of intellectual labor has not been recognized as an object when concept originated. It was developed as a contractual relation between the King and the person who agreed to start an industry with the invention of his hand (N.S. Gopala krishnan, 1994). But with development of humanitarian thought the labour of men gained importance. With it the intellectual labour was recognized. Since there were violations there, there is a need to protect this intellectual labour and here the seeds of protection of patent were sown.

There are numerous benefits that accrue out of criminalizing patent regime. Firstly it will serve as a deterrent as civil sanctions have proved to be less effective. We have been imposing civil penalties for quite long and yet there is constant increase in patent infringement around the globe. So criminal sanctions shall definitely play a better role in this failing scenario. Criminal punishments invite more public shame for the violator. Thus criminals will be ashamed when they will be jailed and this fear serves as a deterrent enough.

Secondly involvement of state as a party is there in criminal cases. That leads to better adherence. Criminal litigations are less costly and have somehow faster trial mechanism. Cases will be disposed off quickly. Patent holder money will be saved as he will not have to pay hefty sum for lengthy civil litigation. This will provide better assurances and faith in legal systems.

Criminalization of patents shall prevent organized crime and repeated offenders will be discouraged. Many legal scholars and policy makers have largely relied on property law to justify the criminalization of intellectual property infringement. Certainly, one may argue that infringement of intellectual property is like criminal property offenses. When assuming that intellectual property is like tangible property, the intellectual property infringement can deprive an intellectual property owner of some economic value of a good as with the property crime such as theft (Min Ji Ku, 2012)

It does serve greater public good. The patentee will

feel protected. Will definitely invent more in a safer environment when they know that their invention will be protected. This will give boost to industry and technology.

Effective implementation can only be achieved from criminal sanctions. William has well said

“Patents serve a higher end—the advance of science”.⁷

Since all advancement of society rests on patents, there needs to be criminal; sanctions behind them despite of the fact that they are vehemently opposed but the truth is it shall prevent egregious violations.

There is a lot of opposition to making infringement of patents a criminal offence. If criminal sanctions are imposed, infringement will get difficult to prove. While in civil cases the plaintiff has to prove balance of probabilities, in criminal infringement has to be proved beyond a reasonable doubt. Expert evidence proving is required. People who are expert in field of technology as well as patent need will be required. Moreover the judiciary is also not well versed with patent laws. Thus infringement of patents will get harder to prove if criminal sanctions are imposed.

The criminalization of patent infringement has negative impact on the interest of the general public. For instance, even though in existence of patented medicine the availability of generic version of medicine has importance to the society in terms of cost and easily availability. However, in the existence of criminal prosecution, individuals may not take the risk to make available the generic version of medicine. Thus, this will have negative impact on the health of the general public (Israel Begashaw 102-103) .So the purpose of patent protection that is advancement of society comes in picture. Instead of new innovation, there is no innovation. The inventor is constantly under fear of being nagged in a criminal prosecution in case his patent bears chance resemblance to some previous patent. So he is prompted to sit quite and not call for patenting his product or process. This will seriously affect the development and innovation.

There are issues of who should be prosecuted, double jeopardy and alike that may arise of criminalising patent infringement as well. Criminalising will also come heavy on state exchequer as cost in criminal cases is generally borne by the state in majority countries. This will increase a country's spending rather than generating revenue as is in civil cases. Monetary loss will be suffered by the country.

⁷ Available at http://todayinsci.com/QuotationsCategories/P_Cat/Patent-Quotations.htm

So its going to come heavily especially in developing countries.

There is also a fear of increased litigation which shall heavily burden the already burned courts. Our courts have hundreds or rather millions of small and big cases pending. Criminalising patent regime shall increase the number of cases in law courts. Focus of judiciary will be shifted from heinous criminal offences to the ‘not so important’ patent infringements. This will adversely affect the law protection and enforcement in legal system.

Moreover, in case of developing countries where less patents occur, the benefits of criminalisation shall be reaped by foreign companies, firms and inventors, while the domestic patent holders will be served no better good in their home country.

Though criminalising is not going to solve all problems, but it is a cure enough to reduce the infringement in arena of patents. Since developing countries do not have well versed criminal systems to deal with patent infringement they can take two steps in this direction. Firstly, limiting the criminal sanctions to cases where the infringement was done to fund organised crime or cases where health or safety of general public is at risk. Secondly, attempting, aiding or abetting and inciting infringement of patents should not be made as an offence initially, since legal expertise is not available, caller for harsher punishments to lesser grave crimes is not advisable. E-filing of cases can also solve a lot of problems as more cases will be reported.

There is a need to spread awareness about patent infringement. Many infringers do not themselves know that an infringement is being caused by them. There is a need to sensitise the society, so that they take patent infringement as a serious crime. Judges as well as the advocates should be well versed with patent laws. They should have wide and up to date knowledge in this regards so that matters can be adjudicated flawlessly.

Further, even if civil sanctions are sufficient to promote progress, some scholars have emphasized the expressive value of criminal punishments because the public demands moral condemnation of criminal wrongdoers, whether natural persons or corporations; when the law satisfies that demand, it creates social welfare. Thus, if society views patent infringers as thieves and parasites and feels strongly about communicating this disapproval, criminal sanctions may provide a tool that is more effective than letting infringers and patent owners resolve their disputes in a civil courtroom (Irina D. Manta, 2010).

Since the concept of patents protection is not limited by physical boundaries and geographical differences, there is also a need to standardise patent protection procedures and laws across all countries. Treaties, Conventions and covenants should be signed among countries.

If a country can afford a legal structure and judiciary well versed with patent issues, its citizens and the legislature is grounded enough to the need of this change, it should in all ways, go for criminalisation of patent infringement as Mark Twain (Sideways and Backwards: A Broken Patent Process, 2014) has well summed up :

“A country without a patent good patent laws is just a crab and can’t travel any way but sideways and backwards”.

Criminalising the patent infringement is like punishing for not wearing helmets by pillion riders. We all are going to dislike it in starting, taking it to be useless, but slowly its benefits are going to come to light. Making changes is as tough as living with the old static laws. The change is going to be tough but it will serve greater good than harm. So for an exponential progress criminalising patent infringement is called for. The civil remedies have already created a mess in the world lets shift focus to criminal remedies and make the world a beautiful place to live in.

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Enhancing Water Resource through Wasteland Management: Case study of Jawhar Taluka, Thane District, Maharashtra

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Abstract:

Fresh water resources are getting depleted at a rapid rate and are also becoming increasingly scarce in many areas due to its multifunctional usage. Alarming bell is already noticed through increased frequency and severity of drought conditions in different parts of the world. Water scarcity index is predicting Third World War for fresh water resources. It is therefore essential to mitigate this problem by managing and enhancing the available water resources through various feasible measures. With this focus of study 'Jawhar Taluka' was selected as case for present research paper. 'Jawhar' is a plateau and receives heavy rainfall as it falls under the Western Ghat ranges dissected by major rivers. Largely inhabited by tribal population, water scarcity, hunger, malnutrition and prevalence of unhygienic conditions is peculiar of the area. Jawhar taluka has nearly 20 % of wasteland which can be put under gainful utilization by enhancing water retention capacity through watershed development techniques for meeting the water demands and removing other problems of the native tribal's.

Keywords: *Wasteland management, watershed development programmes, tribal population.*

Introduction

Water Conflicts since historical times continue to exist and would become still severe in near future. Rising demands for water in both rural and urban areas for irrigated agriculture, domestic use, institutions, commerce and industry are forcing stiff competition over the allocation of scarce water resources and their uses.

Drinking water is a basic human right and the state has the responsibility to provide safe drinking water. (Panickar, 2007). Water and sanitation have been recognized as the essential needs of human development and are also part of the Millennium Development Goals. Despite huge investments in the sector by governments and others, many still do not have access to these basic needs. The Government of Maharashtra (GOM) has so far invested considerable amount to address these needs and made substantial progress in enhancing the coverage and improving the quality of delivery. Despite these efforts, as of today there are many habitations that do not have access to desired quantity and quality of drinking water. World Bank funded project titled- Jalswarajya has also been launched in the year 2003, which is designed to

strengthen the implementation of the reform approach all over the state. The vision of the Government of Maharashtra is to: "Empower the rural communities in the state of Maharashtra, especially the poor and the vulnerable sections, to identify, plan and manage their water and sanitation resources and assets so as to facilitate better access to adequate/appropriate standards of service delivery in a sustainable, equitable and just manner. Efforts in this direction were undertaken by Brihanmumbai Municipal Corporation on the middle Vaitarna project to augment 455 million liters of water daily to the city of Mumbai. However the tribal's from Thane district are objecting to Brihanmumbai Municipal Corporation plan of middle Vaitarna project that would be providing more water to Mumbai city. The point to note is that this water from Vaitarna travels through the parched tribal talukas of Thane district. The struggle therefore for water in the dry lands of Mokhada and Jawhar is set for a confrontation with tribal leaders from these pockets vowing to intensify their stir. The leaders have threatened to embrace death, if necessary, through 'Jal Samadhi'. The present paper thus attempts to study the geographical potentials of the study area (figure 1) and suggest remedial measures to enhance the water resources, besides improving socio-economic

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conditions of the people through wasteland management in Jawhar tehsil.

Research Objectives

1. To study the geographical aspects of Jawhar taluka.
2. To study the location and spatial distribution of the settlements in the study area.
3. Appraisal of government schemes adopted in the study area.
4. Possible measures for enhancing water resources and improving socio-economic conditions of the tribal's by wasteland management in the study area.

Sources of Data Collection and Research Methodology

1. Data is collected from relevant secondary sources such as government publications, census data, and Survey of India topographical maps.
2. Field survey has been undertaken to collect primary data with the help of a questionnaire to understand water problems of the area.
3. Data collected is analyzed by simple statistical techniques.

Study Area: Jawhar Taluka is a historical place as is known to be ruled by Tribal king since 14th century and is proved by the presence of Jawhar palace. Jawhar tehsil is located at 19° 43' to 20° 05' North latitudes and 72° 55' to 73° 20' East longitudes with an administrative area of 640.52 sq.km to the north of Thane district in the state of Maharashtra.

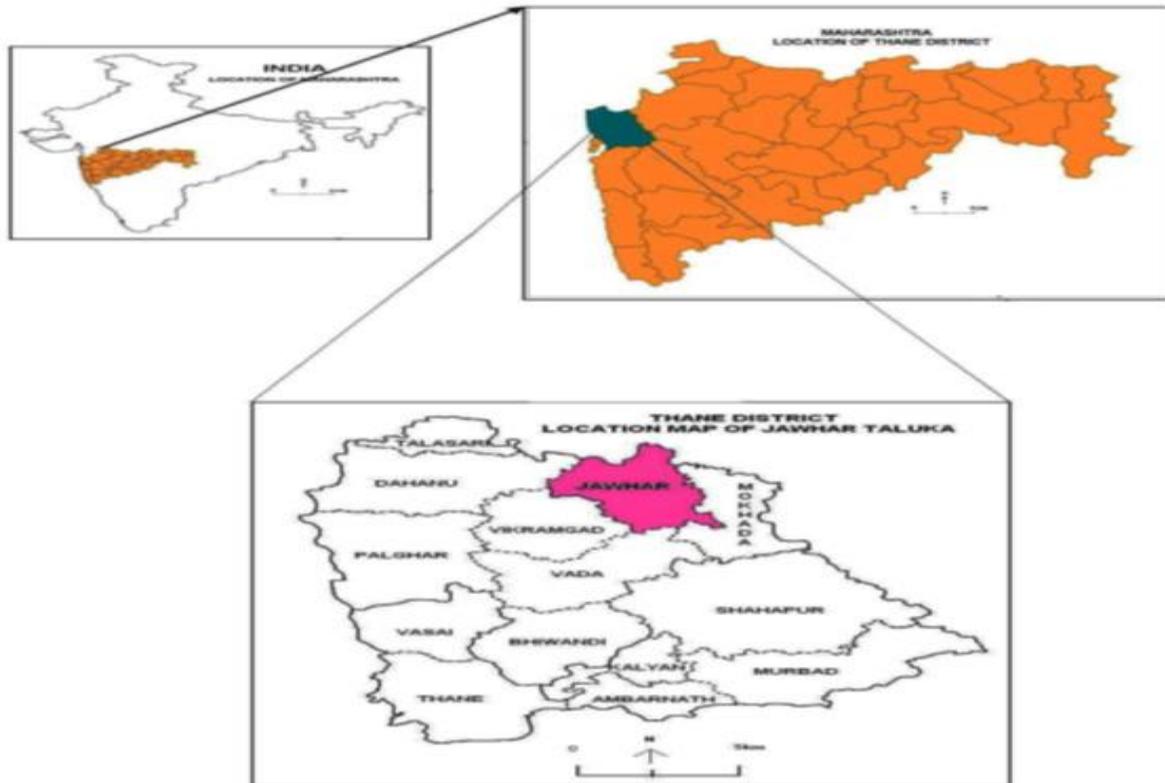
The tehsil is bordered by union territory of Dadra and Nagar Haveli to its northwest, the state of Gujrat to its north, Nashik district to its northeast, and the tehsils of Mokhada, Vada, Vikramgad and Dahanu to its east, south, southwest and west respectively (**figure2**). 'Thane' the administrative district head quarter and 'Mumbai' the state capital is at a distance of 130 kilometer and 166 kilometer respectively from the town of Jawhar. Thane district comes almost entirely under the Tribal Sub Plan (TSP or the Integrated Tribal Development Program), especially talukas like Palghar, Dahanu, Murbad, Shahpur, Jawhar and Thane district comes almost entirely under the Tribal Sub Plan (TSP or the Integrated Tribal Development

Program), especially talukas like Palghar, Dahanu, Murbad, Shahpur, Jawhar and Wada. According to the Ninth Five Year Plan (1997- 2002), one of the reasons for this focused effort was, 'Post-independence, the requirements of planned development brought with them dams, mines, industries, and roads – all located on tribal lands.

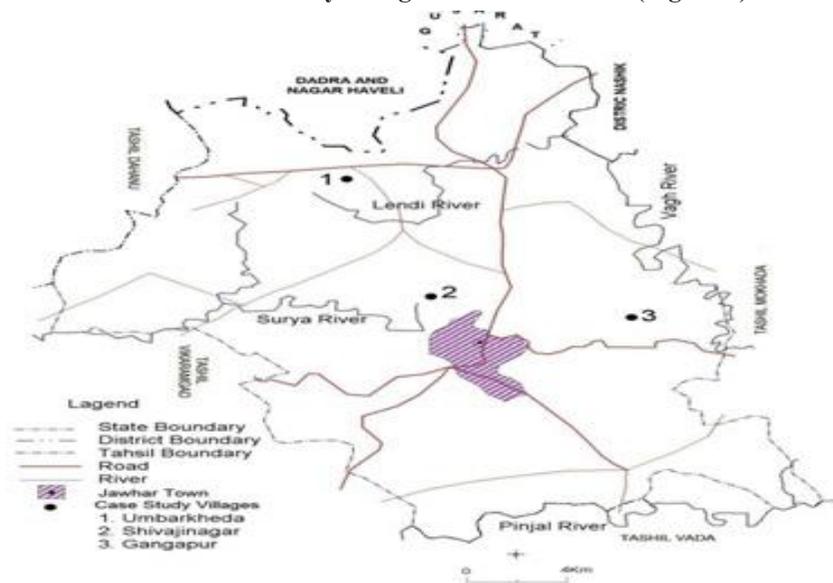
With these came the concomitant processes of displacement, literal and metaphorical. Tribal's found themselves at a profound disadvantage in the face of an influx of better equipped outsiders into tribal areas. The repercussions for the already fragile socio-economic livelihood base of the tribal's were devastating – ranging from loss of livelihoods, land alienation on a vast scale, to hereditary bondage.' Hence Jawhar got the upper district status comprising six tehsils namely: Dahanu, Palghar, Vikramgad, Mokhada, Vada and Jawhar in 1993 for the improvement of administration to boost socio-economic development of the tribal people.

Jawhar tehsil is situated in the Sahyadri mountain ranges at an altitude of 447 m above MSL. It has hot and humid climate. Rainy season with 110-120 days and average annual rainfall of 236 cm distributed from June to September. The area is well drained by rivers viz: Surya, Pinjal, Lendi, Vai and Deharji. The area is covered with reddish light color soil that has very poor water retention capacity. Its terrain is undulating surfaced with boulders, gravels and stones. The southern part of the tehsil is covered by massive lateritic rocks with very sparse vegetative cover and so unsuitable for cultivation as well. Jawhar is thus covered by undulating terrain with relatively steeper slopes and thin soil cover that is unable to retain water (figure 3). Thus in spite of receiving well distributed heavy rainfall the area experiences severe water scarcity during summers. Lack of planning, appropriate governance by the administrative agencies and weak locals (that are largely tribal with low socio-economic status) are mainly responsible for water scarcity situation from the month of January onwards till the arrival of next monsoon in June or July.

Location of the Study Area: Jawhar Tahsil (Figure 1)



Location of Case Study Villages in Jawhar Tahsil (Figure 2)



Since the area has four significant rivers viz. Surya, Pinjali, Vagh and Deharji in its vicinity major dams are built to supply water to the neighbouring area of Mumbai Metropolitan Region. Further to add to their woes, a chain of dams viz: Damanganga-Pinjal link project is under way to meet urban requirements

while tribal people would also lead to their displacement besides facing suffering from water scarcity (figure 4). It is a known fact that most of the primary environmental governance mechanisms like Environmental Clearance which



Relief Feature of Jawhar - Figure 3 (google maps)

Damanganga - Pinjal Link

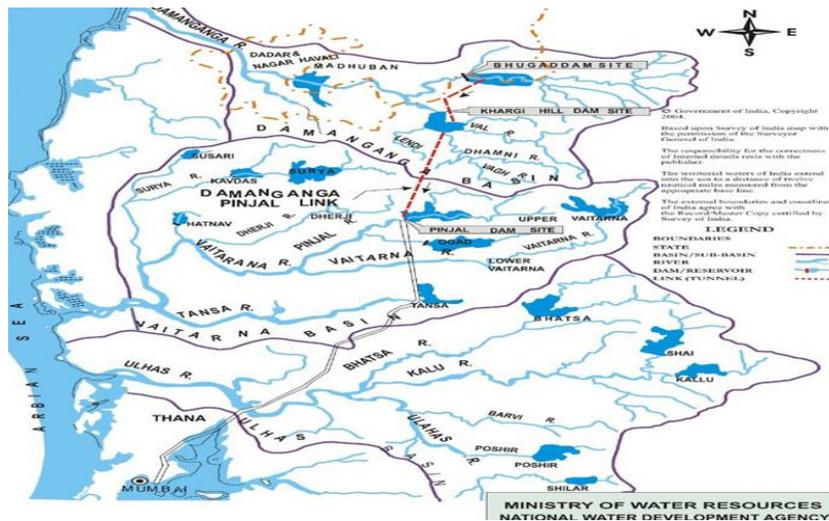


Figure 4

(Source: <http://www.google.co.in/imgres?imgurl=https://vayamindia.files.wordpress.com/2011/10/>)

includes Environment Impact Assessment and Public Hearing are not taking place in such cases. In dams where Protected Areas are also being submerged, officials are looking at Environmental Clearance as hurdles, which need to be 'fast tracked'. Indeed, it has been reported that Gargai and Pinjal Dams are on 'Fast track'. These aspects are very threatening and needs urgent attention since all these projects have massive impacts, both socially and environmentally. It is important to note that the area has Vaitarna and Surya dams in its vicinity. However most of this water is supplied to urban areas of Thane district and to the city of Mumbai while the tribal people of these tribal dominated tehsils remain thirsty of water.

Spatial distribution and location of the settlements in study area: Jawhar teshil has a total geographical area of 640.52 sq. km. The total population in the tehsil is 1, 11,039 distributed in 107 settlements, while two settlements are deserted. Spatial distribution of settlements is dispersed in nature (figure 5). The tehsil has a large proportion of scheduled tribe population approximately 90 per cent as per 2001 census data. Literacy rate is below 40 percent (table 1). Nearly 50 per cent of the population is dependent population. The major land use in the tehsil is agriculture (47 %) and forest (31 %). Wasteland is around 20 per cent (table 2).

Table 1: Socio-economic aspects of Jawhar Tehsil: 2001

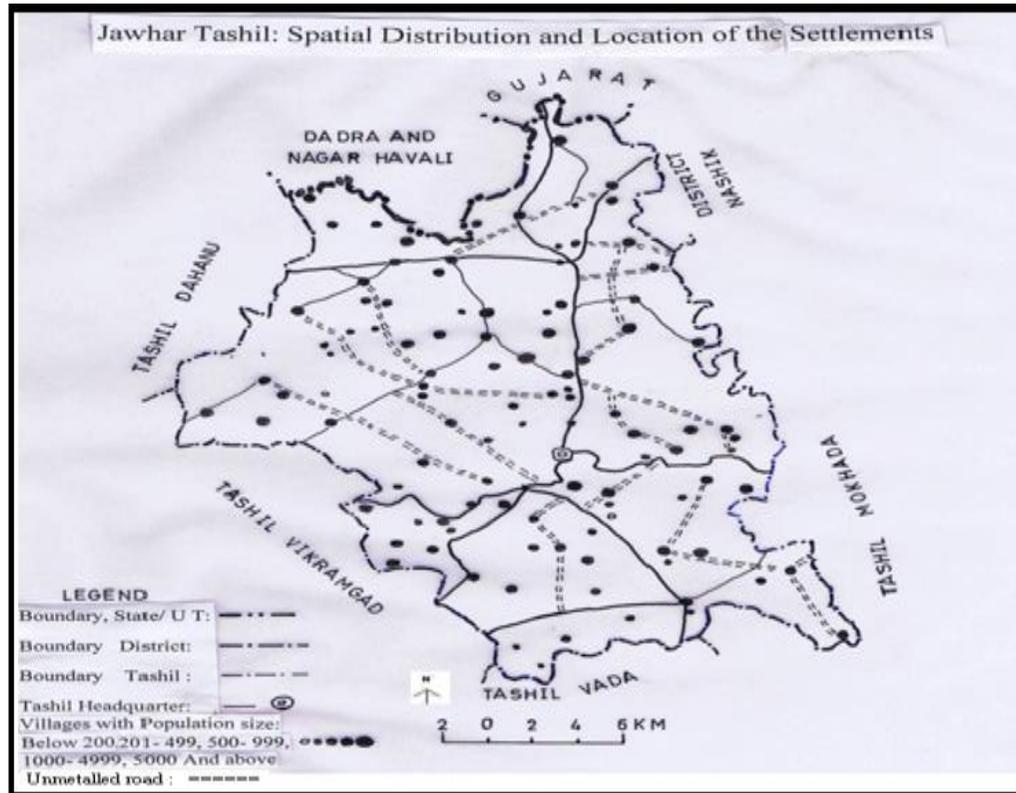
TGA	T P	HH	SC	ST	Literacy	Total workers	Main workers	Marginal workers	Non-workers
640.52 sq.km	111039	21481	1106	99932	39999	57390	41875	15485	53649
Percentage to total			0.99	89.99	36.02	51.68	37.71	13.94	48.31

Abbreviations: TGA: Total Geographical Area; TP: Total Population; HH: Number of households; SC: Scheduled Caste population; ST: Scheduled tribe Population.

Table 2: Landuse In Jawhar Tehsil: 2001 Census (Area in sq.km)

TGA	Forest	Agriculture use	Cultivable waste	Area not available for cultivation
640.52	196	297.5	65.13	60.70
% to total area	30.8	46.7	10.2	9.5

Figure: 5



Population is largely employed in primary sector, mainly agriculture, forestry and livestock based on traditional method. The productivity and income therefore is very low. In terms of accessibility the tehsil has only road transport served by State transport bus service (figure.5). The state highway passes through the tehsil head quarter. However most of the area being hilly is served by unmetalled road. Hence transport connectivity with other major urban centres of the district and the state is relatively low. These factors together contributed for low level of socio-economic conditions of the people in the study area.

Water Sources and water situation in Jawhar tehsil: As per the WHO norms 100 litter water should be available per capita to maintain hygiene and sanitation.

The main source of water for the settlements in the tehsil of Jawhar is wells. But in the study area particularly in the months of March, April, May and half June there is acute scarcity of water. Only 3-4 liters of water per person per day is available which is brought by womenfolk and children from 2-3 km of distance drawn from wells. As most of these wells go dry in summer, many of these settlements are covered under government's water supply schemes either by tap water or hand pumps. Water Supply Schemes: Jawhar taluka has been provided with water supply schemes by two government agencies namely: Maharashtra Jivan Pradhikaran with a total of 5 schemes serving a population of more than twenty thousand in 33 settlements (table 3).

S. No	Water Supply scheme Agency	No. of Schemes	No. of settl. covered	Total Pop.	% of S.T. Pop.	Status of Scheme		Reasons of non-working
						Work-ing	Non-working	
1	Maha-rashtra Jivan Pradhikaran	05	33	21108	98.6	03	02	Under repair
2	Zilla Parishad	26	49	24732	94.05	17	09	03-Under repair, 06 Electricity bill not paid
Total	02	31	82	45840	96.33	20	11	09

The second government agency is Zilla Parishad with 26 water supply schemes in 49 settlements serving a population of nearly twenty five thousand. However of these, two schemes of Maharashtra Jivan Pradhikaran and nine schemes of Zilla Parishad are at present non-functional mainly due to non-payment of electricity bills or are under repair. It is important to note that the settlements are largely tribal settlements whose economic conditions are so low that it is just impossible for them to pay these electricity bills. Hence while adopting such schemes due care should have been taken of these recurring costs to be borne by the supplying/ providing agencies. It is only then possible to keep these water supply schemes functional and viable over the period to serve the basic purpose.

Failure to take care of these aspects while adopting such schemes would mean waste of public funds and a mockery of the poor. It is also important to note that lack of knowledge of the physiographic conditions of the region led to many of these projects going high and dry with respect to amount spent and no water storage leading to wastage of public funds. Following photographs reveals the facts of the region. A primary study of few settlements was undertaken by the author to understand the ground reality regarding drinking water situation in these tribal settlements. A purposive sample of settlements some with dry and other with sufficient water conditions in the wells during summer is undertaken as given in table 4.

Table 4: Water Situation in Sample Villages of Jawhar Tehsil (2012)

S. No	Name of the Village	Total Pop. / No. of HH.	No. of Wells	Average Depth of wells	Water Table in Rainy season	Water situation in Summer season
1	Shivajinagar	912 (175)	06	15-25feet	Ground Level	no water
2	Umbarkheda	1115 (223)	01	25-30 feet	Ground Level	no water
3	Podchipada (Gangapur)	564 (172)	02	10-20 feet	Ground Level	Sufficient water

(Primary data: field survey by author)

Shivajinagar village with a population of 912 with 175 households has 6 wells. Two small streams also exists in the settlement namely Payricha nala to the north and Bez nala to the west at half kilometer distance. These streams have water up to April that is used for livestock. Drinking water needs are met by 06 wells in the village that go totally dry in the summer. Villagers (mainly women, girls and children)

therefore bring water from Bhoje pada and Gorthan by walking a distance of 2 km in the scorching sun. Tap water supply scheme is adopted in the village but since the village is located on a hillock and in absence of regular electricity supply, water is not pumped in the overhead tank. The water scheme has thus failed to meet the basic water requirements of the people.



Water Problem: Fate of our young generation

High and dry bund at Dolara village. Source: Mid Day May 30, 2012 MUMBAI PIC/Shadab Khan.

Tokarkand village, Jawhar taluka, Water storage capacity- 0.56 cubic metres. Money spent- Rs. 8.87 lakh. Present status- No water.



Gender discrimination in fetching water as women and girl child are largely noticed in the ground reality

- **Gangapur (Pondichapada) with a population of 564 and 172 households have sufficient water.** There are 02 wells in the village. Presence of Kalshet dam in the upper stream provides with sufficient drinking water in the well during summer as it is located in the bed-stream. But during rainy season the flood water enters in well and this contaminates well water. People thus suffer health problems associated with contaminated water. Other well water is not suitable for use, as the well remained unused for years due to a death of old lady in the well.
- **Umbarkheda village with a population of 1115 and 223 households** has only one well which goes dry in summer. People need to walk a distance of 1 km. to fetch well-water from Sakharshet village and to Mahalepada reservoir for bathing.



Women and Children bear the brunt of water crisis



Gangapur: A drinking water well constructed in the bed of the river



Water Scheme: Construction of Drinking water well by Zilla Parishad in Umberkheda village



A small check dam near Shivanagar



Drinking Water situation in the well during July



Drinking water supply by tanker in May.



Shivajinagar: Wasteland used for grazin



Gangapur Village: Deforestation in the study area.



Fanaspada: Greenary and flowing river during July.

Domvira Dam Water Leakage: Nearly Rs. 73 crores are spent from the fund of Adivasi scheme on the construction of dam to provide water for drinking and irrigation to the people of Jawhar town and to the villages located in the vicinity of dam. However poor quality construction has caused leakages in the dam in the very first year of its completion.

At present there is 14.49 million liters water is available in the dam (Reported in 4th October 2012 Lokasatta news paper)



Water leakages in dam due to Poor construction quality

Measures suggested for enhancing water capacity in the study area.

1. Micro watershed development programmes need to be adopted in this hilly area by involving local community under NREGS to enhance water resources in the study area.
2. Implementation of afforestation programme on the hill slopes by contour bunding to check soil erosion caused by deforestation.
3. Building of Gabrian structure (stony wall with mesh) on the small gullies and streams
4. Construction of Vanrai bandhara by using vegetative material mixed with mud and filled in cement bags to construct small bands on small streams by which water can be accumulated for cultivation and for livestock. It can be done with the help of village Yuva mandals or NSS volunteers during the period of retreating monsoon in the month of October.
5. Constructing concrete check dams from the budget of Gram panchyat or Panchyat samiti.
6. Construction of Farm ponds for water percolation and farm fish farming

7. Repair of existing tanks, wells, ponds and wells.

8. Desilting of dams, lakes and wells to increase storage of water.

9. Increasing awareness among people to keep water supply schemes of government functional.

10. Use of wasteland (gur charan) to construct Village Lake.

11. Using solar and wind energy to pump water for the settlements located on the hill tops. This will keep the government water schemes functional even in the areas with irregular electricity supply.

Measures suggested for increasing socio-economic status of the people in the study area by utilizing wasteland:

- **Wasteland development programme** in Jawhar Teshil is being implemented for socio-economic upliftment of tribal population by adopting modern agricultural practices. Thane District Collector Shri Abasaheb Jarad undertook agricultural project for socio-economic upliftment of tribal population. Under this scheme during the year 2011-12 about 60 acres of wasteland from 27 villages has been brought under Turmeric cultivation in Kharif season, involving 102 farmers from Jawhar teshil. The

farmers were trained by agricultural department of the district. The seeds of turmeric were brought from Salem of Tamil Nadu state. A subsidy of 90% was given by government and 10% contribution from the farmers. A sum amount of Rs 9, 05,000 was spent on the project by the government. The turmeric produced under this scheme was sold by various Zilla Parishad departments under the “**TARPA Brand**” on trial basis. The name ‘Tarpa’ is given due to the Tarpa traditional musical instrument played by the tribal. It was a very successful project for economic upliftment of tribal people to some extent. Tribal farmers of Thane district were given a pleasant surprise on the auspicious day of ‘Gudi Padwa’ - the district collectorate commenced distribution of ‘Tarpa’ brand of turmeric produced by farmers from Jawhar and Mokhada talukas. The agriculturist from this tribal belt, under the banner of ‘Utpadak Shetkari Sahakari Sanstha’ have cultivated 100 tonnes of turmeric; the major ingredient of any kitchen, and is sold in the market at cheaper rates. While most brands sell the spice between Rs.80 to Rs.350 per kg, ‘Tarpa’ was made available for Rs180 per kg. in the open market.

- The forested area in the district has wild fruits and flowers, besides medicinal plants that can be sold by tribals in the neighbouring areas.
- Wild life beauty with hilly region also provides excellent recreational week- ends to the urbanites from Mumbai Metropolitan Region.
- It is essential to club small padas and wadis that are scattered into a bigger settlement so that a minimum threshold population is available to make provision of basic amenities feasible and sustainable.
- The region needs to be well connected with road transport to facilitate sell of these forest produce as well as in attracting tourists to week end destinations. This will facilitate to increase the economic opportunities for the tribal’s in the region.

Findings and Conclusion

It is important to study the drainage system of the region and soil characteristics while planning micro watershed projects. Surface and sub-surface waters are both subject

to natural flux with time. Wet Years and dry years that can be expected must be handled efficiently with specific strategies to minimize the hardships. In wet years there is plenty of surface water and the near surface groundwater resources are replenished. During wet years we should also adopt artificial recharge of excess of surface water into subsurface water areas that are too deep. Rejuvenating all these surface and subsurface water sources by desilting of ponds, lakes, wells and dams is essential. Preventing deforestation on hill tops and slopes to protect soil erosion and reduce surface runoff in these ecologically sensitive zones. This will help to increase infiltration of rain water, reduce soil erosion and siltation to enhance water storage capacity. This water management plan recognizes that excesses and deficiencies in water are natural and can be planned for. It is therefore crucial to stop successive runoff by increasing the number of check dams and infiltration to minimize water scarcity during summers. It can be achieved only by massive afforestation, planning of small dams for sustainable livelihood without harming the natural surroundings.

The solution therefore lay in devising and implementing micro water shed projects rather than going for building more dams, or increasing the height of the existing dams that displaces vulnerable communities (mainly tribals), loss of cultivable fertile land and submergence of thousands of hectares of forest land from a global biodiversity hotspot region of Western Ghats. It thus calls for concerted efforts by administrative agencies as well an awareness and awakening by the people of the magnitude of water crisis besides settling water disputes on fair and equitable sharing within the admissible limits.

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A Tribal villager ready to harvest aquatic creatures



Author with Tribals in the study area

Competition Law a 'New Wine in New Bottle' or 'An Old Wine in New Bottle' - A study

Anjay Kumar*

Abstract:

Change is the law of nature; therefore law has to change with the changing needs of the society. A law once enacted has to respond the needs of the time. Time change, needs changes, but very often the laws lag behind. It is the duty of the State to keep the existing laws updated. The old laws have to be altered, amended or replaced, while at times new laws have to be created to replace the existing laws. Competition law (Competition Act 2002) is enacted to replace the MRTP Act, 1969. Competition is inherent in the human nature and therefore no question destroying the competition. Roots of competition law very deeply rooted. Competition is a process that requires numerous participants and decentralisation. Competition law has been described as Magna Carta of free enterprise. Competition law is very important to the preservation of economic freedom and our free enterprise system. Competition law required to provide a regulative force which establishes effective control over economic activities. This paper aimed at the study of the Competition Act, 2002 and MRTP Act, 1969 enactments, and comparison between them along substantive provisions of law in the Competition Act, 2002 i.e., Agreement having Appreciable Adverse Effect on competition (AAEC), Abuse of Dominant Position and Regulation of Combination.

Key Words: Competition Law, AAEC, Dominant Position, Merger, MRTP.

Introduction

Law is an instrument to regulate human behaviour, be it social life or business life. With emergence of liberalisation, privatization and globalization, the role of competition law increased and competition law was introduced to ensure competition in the market. Whenever there is competition there is a likelihood of unfair means. Violation of the rules of the game is the essence of unfair competition and it is the nature of the competition that determines those rules. Competition makes enterprises more efficient and offers wider choice to consumers at lower prices. This ensures optimum utilization of available resources. It also enhances consumer welfare since consumers can buy more of better quality products at lower prices. Fair competition is beneficial for the consumers, producers, sellers and finally for the whole society since it induces economic growth.

Competition is inherent in the human nature and therefore no question destroying the competition. The roots of competition law very deeply rooted.

The first traceable event of origin of competition law can be regarded as the book of 'wealth of nations' by Adam Smith.¹

Competition is a process that requires numerous participants and decentralisation.

Competition law has been described as magna carta of free enterprise. Competition law is very important to the preservation of economic freedom and our free enterprise system. Competition law required to provide a regulative force which establishes effective control over economic activities.

Competition means a struggle or contention for superiority, and in the corporate world, the term is generally understood as a process whereby the economic enterprises compete with each other to secure customers for their product. Competition is a process of economic rivalry between market players to attract customers. Competition is a situation in a business environment where business independently strives for the patronage of customers in

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¹ www.cci.gov.in accessed on 10-03-2016

order to achieve their business objectives. Free and fair competition is one of the pillars of an efficient business environment. Infusion of greater degree of competition can play a catalytic role in unlocking the fuller growth potential in many critical areas of the economy. Competition has a driving force in the global economy. Competition is the kind of market pressure, which must be exerted to penalise the laggards and to reward the enterprising, and in this way to promote economic progress.² Competition is a situation in a market in which firms or sellers independently strive for the buyers' patronage in order to achieve a particular business objective for example profit, sales or market share³. Healthy competition amongst the market players leads to maximization of consumer welfare and benefit. Cheap or low price is not the only criteria of competitiveness but simultaneously the consumer should get value for his money in the form of superior quality, utility, ample choice, prompt post sales service, and other relevant benefits depending upon the peculiar nature of the goods or service. The existence of healthy competition in the market is of utmost importance.

Evolution of Competition Law

Before MRTP Act came into force, there are limited provisions existed which deals with the competition.⁴ After the independence, India has adopted a socialist, regulated mode for economic mode for economic development of nation. The industrial sector was highly regulated by the Government. India was a closed economy. Various government interventions in the form of licensing, permissions etc. were the part of industrial development process. The Government of India embarked on a regulated industrial development and enacted Industrial Development and Regulation Act, 1951. Having adopted socialist approach for development there were constant endeavours on the part of the Government to see that economic power is not concentrated in few hands giving rise to private sector monopoly. Public sector monopoly was created and fostered. In order to control monopolies and to protect the interests of the consumers, Monopolies and Restrictive Trade Practices, 1969 was enacted to achieve the objectives Article 38 and Article 39. Under MRTP, Act the monopolies are prohibited. Business

should not become so big or resort to such policies that the consumer becomes the victim. Accordingly, a MRTP commission was constituted to administer the Act.

Since 1970 the MRTP Act was amended several times to suit the changing conditions in the country. It was only with the opening up of the economy in 1991 and the change in the philosophy of the government that brought about a dramatic shift in the economic scenario of the country. It was felt that the MRTP Act had outlived its utility and it no longer served the purpose in the changed environment. It is increasingly recognised more than ever before that completion in markets promotes efficiency, encourages innovation, improve quality, boosts choice, and reduces costs, leads to lower prices of goods and services. It also ensures availability of goods and services in abundance of acceptance quality at affordable price. It is also a driving force for building up the competitiveness of the domestic industry. The businesses that do not competition at home are less likely to be globally competitive. Competition ensures freedom of trade and prevents abuse economic power and thereby promotes economic democracy.

Competition Law for India was triggered by preamble and directive principles⁵ of the Constitution of India. In preamble the objective is to achieve justice social, economic and political. Articles 38 and 39⁶ of the Constitution of India mandate, inter alia, that the State shall strive to promote the welfare of the people by securing and protecting as effectively, as it may, a social order in which justice – social, economic and political – shall inform all the institutions of the national life, and the State shall, in particular, direct its policy towards securing and reduce the gap between the rich and poor. After the independence passed Monopolies and Restrictive Trade Practices, 1969(hereinafter called as MRTP Act). The MRTP Act is regarded as the competition law of India, because it defines a restrictive trade practice to mean a trade practice, which has, or may have the effect of preventing, distorting or restricting competition in any manner. But the MRTP Act,⁷

⁵ The Constitution of India, arts 38 and 39(1)

⁶ That the ownership and control of material resources of the community are so distributed as best to subserve the common good; and that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment.

⁷ The principal objectives sought to be achieved through the MRTP Act are: i) prevention of concentration of economic power to the common detriment; ii) control of monopolies; iii) prohibition of Monopolistic Trade Practices (MTP); iv) prohibition of Restrictive Trade Practices (RTP); v) prohibition of Unfair Trade Practices (UTP).

² Shahid Alikhan and R.A.Masheekar (eds.), *Intellectual Property and Competitive strategies in the 21st Century* 54 (Kluwer Law Information 2nd Edn.)

³ www.worldbank.org accessed on 10-03-2016

⁴ The Indian Contract Act, Directive Principles of State Policy (Non-enforceable).

in comparison with competition laws of many countries, is inadequate for fostering competition in the market and trade and for reducing, if not eliminating, anti-competitive practices in the country's domestic and international trade. The objective of the MRTP Act is to curb Monopolistic, Restrictive and Unfair Trade Practices which disturb competition in the trade and industry and which adversely affect the consumer interest. A parallel legislation known as the Consumer Protection Act, 1986 has also come into being, which deals with Unfair Trade Practices. The regulatory provisions in the MRTP Act apply to almost every area of business – production, distribution, pricing, investment, purchasing, packaging, advertising, sales promotion, mergers, amalgamations and takeover of undertakings. Under the MRTP Act, a Regulatory Authority called the MRTP Commission has been set up to deal with offences falling under the statute.

Metamorphosis of MRTP Act, 1969 into Competition Law Act, 2002

Prior to 1984, the MRTP Act contained no provisions for protection of consumers against false or misleading advertisements or other similar unfair trade practices and a need was felt to protect them from practices, resorted to by the trade and industry, to mislead or dupe them. The Sachar Committee⁸ recommended that a separate Chapter should be added to the MRTP Act defining various Unfair Trade Practices so that the consumer, the manufacturer, the supplier, the trader and other persons in the market can conveniently identify the practices, which are prohibited. Making false or misleading representation of facts disparaging the goods, services or trade of another person is also a prohibited trade practice under the Indian law. With the globalisation of world economy, it became necessary to encourage competition to foster speedy economic development.

In 1991 we adopted an economy dependent on free market principles and left the 'command and control' with Liberalisation, Privatisation, and Globalisation (LPG). The LPG pattern seeks to make competition a driving force in the economic and commercial activities of the world.⁹ A perusal of the MRTP Act will show that there is neither definition nor even a mention of certain offending trade practices which are restrictive in character.

⁸ Sachar Committee, 1978

⁹ As observed by Professor Wolfgang Kartte, the Chairman of the German Federal Cartel Office, "Competition is the engine of market economy"

Some illustrations of these are: Abuse of Dominance, Cartels, Collusion and Price Fixing, Bid Rigging, Boycotts and Refusal to Deal, Predatory pricing. The absence of specification of identifiable anti-competition practices gave room to different interpretations by different Courts of Law, with the result that the spirit of the law often escaped being captured and enforced. While a generic definition might be necessary and might form the substantive foundation of the law, it was considered necessary to identify specific anti-competition practices and define them so that the scope for a valve or opening on technical grounds for the offending parties to escape indictment would not obtain. Hence, the need for a new and better law was recognised, which gave birth to the Competition Act, 2002. Furthermore, some of the anti-competition practices like cartels, predatory pricing, bid rigging etc. are not specifically mentioned in the MRTP Act but the MRTP Commission, over the years, had attempted to fit such offences under one or more of its sections by way of interpretation of the language used therein. Another dimension that marked the thinking of the Government particularly after the 1991 economic reforms was the dynamic context of International trade and market as well as the domestic trade and market. When the MRTP Act was drafted in 1969, the economic and trade environment prevalent at that time constituted the premise for its various provisions. There has been subsequently a sea change in the milieu with considerable movement towards liberalisation, privatisation and globalisation. The law needed to yield to the changed and changing scenario on the economic and trade front. This was one important reason why a new competition law had to be framed.

The experience in administering the MRTP Act, since 1969, the deficiencies noted in the said Act, the difficulties that arose out of different interpretations and judgments of the MRTP Commission and the superior Courts of Law and the new and changing economic environment prompted by the LPG paradigm and the economic reforms of 1991 encouraged the need for a new competition law. There is need to shift focus from curbing monopolies to promoting competition. The Government has decided to appoint a committee to examine this range of issues and propose a modern competition law suitable for our conditions.¹⁰

¹⁰ In October, 1999, the Government of India appointed a High Level Committee on Competition Policy and Competition Law to advise a modern competition law for the country in line with international developments and to suggest a legislative framework which may entail a new law or appropriate amendments to the MRTP Act.

Scheme of the Act: The Act has been divided into ten chapters. First chapter contains preliminary provisions¹¹, Second chapter deals with substantive laws¹²; Third Chapter contains provisions relating to Establishment of Commission, Composition.¹³ The fourth chapter provides for Duties, Powers and functions of the Commission¹⁴. Fifth chapter provides for the Duties of Director General¹⁵. Sixth chapter deals with penalties for Contravention of orders of the commission¹⁶. The seventh chapter deals with competition advocacy¹⁷. Eighth chapter deals with finance accounts and Audits¹⁸. Chapter VIII-A deals with competition appellate tribunal¹⁹ and ninth chapter deals with miscellaneous²⁰.

Objectives of the Competition Act, 2002: To provide, keeping in view of the economic development of the country, for the establishment of a Commission to prevent practices having adverse effect on competition, to promote and sustain competition in markets, to protect the interests of consumers and to ensure freedom of trade carried on by other participants in markets, in India, and for matters connected therewith or incidental thereto²¹. In *Completion Commission of India v. Steel Authority of India Ltd*²² the Apex Court observed that the Competition law deals with allocative efficiency, which ensures the affective allocation of resources; *productive efficiency* which ensures that cost or production is kept at a minimum; dynamic efficiency, which promotes innovative practices. These factors, by and large have been accepted the entire world as the guiding principles for effective implementation of Competition law. In view of the Preamble of the Competition Act, 2002, it requires not only protection of free trade but also protection of consumer interest.

The Substantive provisions of Competition law

Anti-Competition Agreements: A scan of the competition law shows that there are two types' agreements, viz., "horizontal" and "vertical" agreements between the

11 The Competition Act ,2002 s.1to 2

12 The Competition Act ,2002 s. 3to 6

13 The Competition Act ,2002 s. 7 to17

14 The Competition Act ,2002 s.18-40

15 The Competition Act ,2002 s. 41

16 The Competition Act ,2002 ss. 42 to 48

17 The Competition Act ,2002 s. 49

18 The Competition Act ,2002 ss. 50 to 52

19 The Competition Act ,2002 ss.53A to 53U

20 The Competition Act ,2002 ss. 54 to 66

21 Preamble to The Competition Act ,2002

22 (2010) 10 SCC 744

enterprises. The horizontal agreements are between two or more enterprises that are at the same stage of the production chain and in the same market²³ while the 'vertical' agreements are between firms at different levels of the manufacturing or distribution processes vertical agreements, for example between a manufacturer and wholesaler which are likely to harm competition albeit less harmful than horizontal agreements need to be addressed in the competition law²⁴. A mainly harmful type of horizontal agreements is the cartel²⁵. The vertical agreements are destructive, if they are between firms in a position of dominance.

Abuse Of Dominance: "Dominant Position" has been defined in the Section the 4 Act in terms of the "position of strength, enjoyed by an enterprise, in the relevant market, in India, which enables it to (i) operate independently of competitive forces prevailing in the relevant market; or (ii) affect its competitors or consumers or the relevant market, in its favour". This definition may perhaps appear to be somewhat ambiguous and to be capable of different interpretations by different judicial authorities. But then, this ambiguity has a justification having regard to the fact that even a firm with a low market share of just 20% with the remaining 80% diffusedly held by a large number of competitors may be in a position to abuse its dominance, while a firm with say 60% market share with the remaining 40% held by a competitor may not be in a position to abuse its dominance because of the key rivalry in the market. Specifying a threshold or an arithmetical figure for defining dominance may either allow real offenders to escape (like in the first example above) or result in unnecessary litigation (like in the second example above). Hence, in a dynamic changing economic environment, a static arithmetical figure to define "dominance" may, perhaps, be an aberration. With this suggested broad definition, the Regulatory Authority will have the freedom to fix errant undertakings and encourage competitive market practices, even if there is a large player around. Abuse of dominance is key for the Act, in so far as dominant enterprises are concerned.

There is no single objective market share criterion that can be blindly used as a test of dominance. The law seeks to ensure that only when dominance is clearly established, can abuse of dominance be alleged. Any ambiguity on this

23 The Competition Act ,2002 s. 3(3)

24 The Competition Act ,2002 s. 3(4)

25 The Competition Act ,2002 s. 2(c)

count could endanger large efficient firms. Before assessing whether an undertaking is dominant, it is important, as in the case of horizontal agreements, to determine what the relevant market is. There are two dimensions to this – the product market and the geographical market. On the demand side, the relevant product market includes all such substitutes that the consumer would switch to, if the price of the product relevant to the investigation were to increase. From the supply side, this would include all producers who could, with their existing facilities, switch to the production of such substitute goods. The geographical boundaries of the relevant market can be similarly defined. Geographic dimension involves identification of the geographical area within which competition takes place. In *Standard Oil Co. Of California and Standard Stations Inc. v. United States*²⁶, the U.S. Supreme Court defined 'relevant market' as "the area of effective competition, within which the defendant operates. The determination of 'relevant market' by the adjudicating Authority has to be done, having due regard to the 'relevant product market' and the 'relevant geographic market'. Dominance is determined by taking into account one or more of the factors given in Section 19(4)²⁷ of the Act. It may therefore be seen that the Act does not frown upon dominance as such but frowns upon abuse of dominance.

Combinations Regulation: Combinations, in terms of the meaning given to them in the Act, include mergers, amalgamations, acquisitions and acquisitions of control, but for the purposes of the discussion that follows, mergers regulation has been reckoned. As in the case of agreements, mergers are typically classified into horizontal and vertical mergers. In addition, mergers between enterprises operating in different markets are called conglomerate mergers. Mergers are a legitimate means by which firms can grow and are generally as much part of the natural process of industrial evolution and restructuring as new entry, growth and exit. A merger leads to a "bad" outcome only if it creates a dominant enterprise that subsequently abuses its dominance. Thus, the general principle, in keeping with the overall goal, is that mergers should be

challenged only if they reduce or harm competition and adversely affect welfare. The Act makes it voluntary for the parties to notify their proposed agreement or combinations to the Mergers Commission, if the aggregate assets of the combining parties have a value in The threshold limits of assets and of turnover would be revised every two years on the basis of the Wholesale Price Index or fluctuations in exchange rate of rupee or foreign currencies²⁸. The Act has listed under section 20 (4) the factors to be taken into account for the purpose of determining whether the combination would have the effect of or be likely to have an appreciable adverse effect on competition.

Competition Advocacy: The Regulatory Authority under the Act, namely, Competition Commission of India (CCI), in terms of the advocacy provisions in the Act, is enabled to participate in the formulation of the country's economic policies and to participate in the reviewing of laws related to competition at the instance of the Central Government²⁹. The Central Government can make a reference to the CCI for its opinion on the possible effect of a policy under formulation or of an existing law related to competition. The Commission is mandated to proffer its opinion to the Central Government within 60 days of receiving the reference. The Commission will therefore be assuming the role of competition advocate, acting pro-actively to bring about Government policies that lower barriers to entry, that promote deregulation and trade liberalisation and that promote competition in the market place. The Act seeks to bring about a direct relationship between competition advocacy and enforcement of competition law. One of the main objectives of competition advocacy is to foster conditions that lead to a more competitive market structure and business behaviour without the direct penalty loaded intervention of the CCI.

Rule of reason: *The rule of reason* is a legal approach where an attempt is made to evaluate the pro-competition features of the restrictive business practice against its

26 337 U.S. 293

27 Market share of the enterprise; size and resources of the enterprise; size and importance of the competitors; economic power of the enterprise including commercial advantages over competitors; vertical integration of the enterprise, or sale or service network of such enterprise; dependence of consumers on the enterprise; monopoly or dominant position whether acquired as a result of any statute or by virtue of being a Government company or a public sector undertaking or otherwise; entry barriers including barriers such as regulatory barriers, financial risk, high capital cost of entry, marketing entry barriers,

technical entry barriers, economies of scale, high cost of substitutable goods or service for consumers; countervailing buying power; market structure and size of market; social obligations and social costs; relative advantage, by way of the contribution to the economic development, by the enterprise enjoying a dominant position having or likely to have an appreciable adverse effect on competition; any other factor which the Commission may consider relevant for the inquiry.

28 The Competition Act ,2002 s.20(3)

29 The Competition Act ,2002 s. 49

anticompetitive effect in order to decide whether or not the practice should be prohibited.³⁰ Under the *rule of reason*, the effect on the competition is found on the facts of a particular case, and its effect on the market condition.³¹ However, for certain kinds of agreements, the presumption is generally that they cannot serve any useful or pro-competitive purpose. Because of this presumption, the law makers do not subject such agreements to the "rule of reason" test³². They place such agreements in the per se illegal category. The Act presumes that the four types of agreements between enterprises, involved in the same or similar manufacturing or trading of goods or provision of services have an appreciable adverse effect on competition, they are agreements regarding prices, agreements regarding market sharing, quantities, bids³³(collusive bidding or bid rigging).

Rule of Per Se: *Per se* means finding illegality on the face of an agreement or practice. Horizontal agreements³⁴, which include membership of cartels, are presumed to lead to unreasonable restrictions of competition and are therefore presumed to have an appreciable adverse effect on competition³⁵. In other words, they are per se illegal. A per se illegality would mean that there would be very limited scope for discretion and interpretation on the part of the prosecuting and adjudicating authorities. The underlying principle in such presumption of illegality is that the agreements in question have an appreciable anti-competitive effect. The vertical agreements will not be subjected to the rigours of competition law. However, where a vertical agreement has the character of distorting or preventing competition, it will be placed under the surveillance of the law. For instance, the following types of agreements, inter alia, will be subjected to the "rule of reason" test. The Act lists the following factors to be taken into account for adjudicatory purposes to determine whether an agreement or a practice has an appreciable adverse effect on competition³⁶, namely, creation of barriers to new entrants in the market, driving existing competitors out of the market, foreclosure of competition

30 World Bank: Glossary of Industrial Organisation, Economics and Competitive Law.

31 T. Ramappa, *Competition Law in India: Policy, Issues, and developments* 93 (Oxford University Press, 3rd edn., 2014)

32 *Standard Oil Co. Of Newjersy v. US* [1911] 221US 1, *Board of Trade of City of Chicago v US* 246 US (1918), *TECO Ltd v. Registrar of Registrar Trade Agreements* (1977) 2 SCC55

33 These include tenders submitted as a result of any joint activity or agreement.

34 The Competition Act ,2002 s. 3(3)

35 *Dry Stone Pipe & Steel v US* 175 U.S. 211 (1899), *Northern Pac. R. Co. v United States*, 356 U.S 1, *Jefferson Paris Hospital Distt. No 2 v. Hyde* 466 U.S. 2 (1984)

36 The Competition Act ,2002 s.19(3)

by hindering entry into the market, accrual of benefits to consumers, improvements in production or distribution of goods or provision of services, and promotion of technical, scientific and economic development by means of production or distribution of goods or provision of services.

Competition Commission of India: Administration and enforcement of the competition law requires an administrative set up. This administrative set up should be more proactive than reactive for the administration of the competition policy. This is not a mere law enforcement agency. This administrative set up should take a proactive stand to be specified and adopted to promote competition by not only proceeding against those who violate the provisions of the competition law, but also by proceeding against institutional arrangements and public policies that interfere with the fair and free functioning of the markets.

Investigation and Prosecution: Adjudicative wing is distinct and separate from the investigative wing in the Act. At the apex level of the investigative wing, there is an official who has been designated as Director General (DG)³⁷. The Director General will not have suo motu powers of investigation. He will only look into the complaints received from the CCI and submit his findings to it. Investigators will be solely responsible for making enquiries, for examining documents, for making investigations into complaints and for effecting interface with other investigative agencies of the Government including Ministries and Departments. The DG has been vested under the Act with powers, which are conferred on the CCI, namely, summoning of witnesses, examining them on oath, requiring the discovery and production of documents, receiving evidence on affidavits, issuing commissions for the examination of witnesses etc. Appeals against decisions and orders of the CCI lie to the COMPAT³⁸ and decisions of COMPAT can be challenged before the Supreme Court.³⁹

Extraterritorial Reach

The Act has extra-territorial jurisdiction.⁴⁰ Its arm extends beyond the geographical contours of India to deal with practices and actions outside India which have an

37 The Competition Act ,2002 s. 41

38 The Competition Act ,2002 s. 53-B

39 The Competition Act ,2002 s. 53-T

40 The Competition Act ,2002 s.32

appreciable adverse affect on competition in the relevant market in India⁴¹. The above provisions are based on what is known as the 'effects doctrine'. This doctrine implies that even if an action or practice is outside the shores of India but has an impact or effect on competition in the relevant market in India; it can be brought within the ambit of the Act, provided the effect is appreciably adverse on competition.

Exceptions

The provisions relating to anti-competition agreements will not restrict the right of any person to restrain any infringement of intellectual property rights or to impose such reasonable conditions as may be necessary for the purposes of protecting any of his rights which have been or may be conferred upon him under the following intellectual property right statutes; the Copyright Act, 1957; the Patents Act, 1970; the Trade and Merchandise Marks Act, 1958 or the Trade Marks Act, 1999; the Geographical Indications of Goods (Registration and Protection) Act, 1999; the Designs Act, 2000; the Semi-conductor Integrated Circuits Layout-Design Act, 2000⁴². The justification for this exception is that the bundle of rights that are subsumed in intellectual property rights should not be disturbed in the interests of creativity and intellectual/innovative power of the human mind. No doubt, this bundle of rights essays an anti-competition character, even bordering on monopoly power. But without protecting such rights, there will be no incentive for innovation, new technology and enhancement in the quality of products and services. However, it may be noted, that the Act does not permit any unreasonable condition forming a part of protection or exploitation of intellectual property rights. In other words, licensing arrangements likely to affect adversely the prices, quantities, quality or varieties of goods and services will fall within the contours of competition law as long as they are not in reasonable juxtaposition with the bundle of rights that go with intellectual property rights.

41 Section 32 says that The Competition Commission of India has the power to enquire into an agreement, abuse of dominant position or combination, if it has or is likely to have an appreciable adverse affect on competition in the relevant market in India, notwithstanding that, an agreement has been entered into outside India; any party to such agreement is outside India; any enterprise abusing the dominant position is outside India; a combination has taken place outside India; any party to combination is outside India; or any other matter or practice or action arising out of such agreement or dominant position or combination is outside India.

42 The Competition Act, 2002 s.3(5)

Another exception to the applicability of the provisions relating to anti-competition agreements is the right of any person to export goods from India, to the extent to which, an agreement relates exclusively to the production, supply, distribution or control of goods or provision of services for such export. In a manner of speaking, export cartels are outside the purview of competition law. A justification for this exemption is that most countries do not desire any shackles on their export effort in the interest of balance of trade and/or balance of payments. The Central Government has power under the Act to exempt from the application of the Act, or any provision thereof, a class of enterprises, a practice, an agreement etc. The provisions in the Act relating to exemptions should enable the Government to take care of the country's goals, objectives and needs. The Act provides flexibility to the Government to use this provision appropriate to the needs of the country.

The differences between the MRTP Act, 1969 and the Competition Act, 2002: The MRTP Act, 1969 based on the pre-reforms scenario, while the Competition Act, 2002, based on the post-reforms scenario, the MRTP Act, 1969 based on size as a factor while Competition Act, 2002 based on structure as a factor. In MRTP Act, 1969 offences implicit or not defined whereas in Competition Act, 2002 offences explicit and defined. In MRTP Act, 1969 the language and arrangement was complex on the other hand in Competition Act, 2002 it is simple in arrangement and language and easily comprehensible. Under MRTP Act, 1969 fourteen (14) per se offences negating the principles of natural justice while in Competition Act, 2002 four (4) per se offences and all the rest subjected to rule of reason. The MRTP Act, 1969 frowns upon dominance whereas the Competition Act, 2002 frowns upon abuse of dominance. The MRTP Act, 1969 Registration of agreements compulsory but no requirement of registration of agreements in Competition Act, 2002. In MRTP Act, 1969 No combinations regulation but in Competition Act, 2002 the 'Combinations' are regulated beyond a high threshold limit. In MRTP Act, 1969, Competition Commission' appointed by the Government whereas 'Competition Commission' selected by a Collegium (search committee) in Competition Act, 2002⁴³. The MRTP the 'Commission had very little administrative and financial autonomy for but comparatively Competition Commission more autonomy for the Competition Commission. In MRTP Act, 1969 there was no competition advocacy role for the Competition Commission but under Competition Act,

43 The Competition Act, 2002, s.9

2002 Competition Commission has competition advocacy role.⁴⁴ In MRTP Act, 1969 there is no penalties for offences but under the Competition Act, 2002 there are penalties for offences. The MRTP Act, 1969 was reactive and rigid but Competition Act, 2002 is proactive and flexible. In MRTP Act, 1969, the 'unfair trade practices' covered but in Competition Act, 2002 'unfair trade practices' omitted. The MRTP Act, 1969, does not vest MRTP Commission to inquire into cartels of foreign origin in a direct manner. Competition Law seeks to regulate them.

Conclusion

The Competition Act, 2002 is a new wine in a new bottle. Wine gets better as it ages. The MRTP Act 1969 has given birth to the new law the Competition Act in line with the changed and changing economic scenario in India and rest of the world and in line with the current economic thinking comprising liberalization, privatization and globalization. The Competition Law provides for a Competition fund, which shall be utilised for promotion of competition advocacy, creating awareness about competition issues and training in accordance with the rules that may be prescribed. A well planned exhaustive competition compliance programme can be of great benefit to all enterprises irrespective of their size, area of operation. India do needs a fresh law for competition and a new regulatory authority. The law will serve the purpose only if it is made independently, runs independently.

Competition improves quality, lower the prices and makes people aware of the attraction of buying a product or service. Maximum benefits are claimed to flow when production is competitively carried out. With the globalization of the world economy, it became necessary to encourage.

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⁴⁴ The Competition Act, 2002, s.49

Marriage between Innovation Bride and Competition Groom: The way Forward

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Abstract:

Intellectual property law and Competition law have evolved historically as two separate systems of law. However, there is considerable overlap in the goals of the two systems of law because both are aimed at promoting innovation and economic growth. Yet there are also potential conflicts owing to the means used by each system to encourage those goals. Intellectual property rights generate monopolies, while competition law combats monopolies. This paper highlights important areas of conflict between the two laws. As certain privileges are being given under the IPRs it is restricted by the enforcement of Competition laws. The imperatives of “tangential competition” and “innovation” are indispensable for attaining sustained fiscal growth. IPRs and competition laws have significant interface in their regulation of diverse issues of the business world. It discusses the IPRs-related competition issues, highlighting abuse of a dominance position due to IPRs. The paper argues that possible hostility between IPRs and competition laws can be reduced if competition agencies are constrained, either by statutes or administrative policy from seeking to fine tune IPR protection..

Keywords: *Intellectual property law Competition law, Innovation Bride, Competition Groom etc*

Introduction

This paper further explores the relationship between Intellectual Property rights and the Competition Law by stating judicial pronouncements on the tension between IPRs and competition policy prevalent in the European Union and United States and how India can develop and formulate its competition policy.

I: Interface between Intellectual Property and Competition Law

Intellectual property rights (IPRs) are intended to reward the author or innovator with the fruits of his or her labour which has been derived from the Locke’s concept of labour. In a sense, the author of intellectual property is given the legal right to exclude others from enjoying the benefits resulting from his work. The justification behind intellectual property rights is that those who invest time and resources for the development of a new technology, system or device should be rewarded with the exclusive right to profit from their investment. Moreover, without the

exclusive opportunity to “exploit the invention” through intellectual property rights, there would be no mechanism through which the owner of the intellectual property right could guard against free riders taking advantage of the innovator’s research and development.¹

Moreover, IPR laws also provide that the protection cannot be for an indefinite period, as after sometime it should be made available to the common masses in their general interest. Even within the IPR period, the intellectual asset may be used without restriction for certain purposes, these not being commercial purposes, for example for the purpose of research and training and educational purposes. Further, in some laws, provision exists for compulsory licensing where under the Indian Patents Act, 1970; a compulsory

license may be sought after three years of the sealing of the patent on three grounds: non-satisfaction of reasonable requirements of the public,

1. non-availability of the patented invention at

¹ Meg Buckley, “LICENSING INTELLECTUAL PROPERTY: COMPETITION AND DEFINITIONS OF ABUSE OF A DOMINANT POSITION IN THE UNITED STATES AND THE EUROPEAN UNION”, Brooklyn Journal of International Law; 2004, available at http://international.westlaw.com/result/default.29 brook J.Int'l L.797, Westlaw Document _08_06_45, (accessed on April 12, 2014).

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reasonable price, or

2. patented invention not being worked in India.²

Tension arises between IPR and competition law because IPR creates market power, even a monopoly, depending upon the extent of availability of substitute products. IPR restricts competition, while competition law engenders it. Hence, competition law takes care of the unreasonable exercise of market power or the abuse of dominant position obtained as a result of the IPR.³

The Competition Act, 2002 in India recognizes the importance of IPRs such as patents, copyrights, trademarks, geographical indications, industrial designs and integrated circuit designs. While Section 3 of the Competition Act prohibits anti-competitive agreements, Section 3(5) lays down that this prohibition shall not restrict “the right of any person to restrain any infringement of or to impose reasonable conditions, as may be necessary for protecting any of his rights” enjoyed under the statutes relating to the above mentioned IPRs. This implies that unreasonable conditions imposed by an IPR holder while licensing his IPR would be prohibited under the Competition Act. This provision is not very dissimilar to the laws in other countries. In some jurisdictions, restrictions that have been regarded as unreasonable, and anticompetitive, include - agreements restricting prices or quantities of goods that may be manufactured, or curbing competition between the licensee and the licensor, stipulating payment of royalty after the license period, certain types of exclusivity conditions, patent pooling, tie-in arrangement, so on and so forth.⁴

Therefore, in the case of unreasonable restrictive practices by the IPR holder, relief is available to the affected parties under the Competition Act. The Commission can pass a variety of orders including: penalty up to ten percent of the turnover, cease and desist order, direct modification of the (license) agreement, and any other order or direction that it may deem fit.⁵

1.1 Nature of Intellectual Property Rights

i. The role of intellectual property rights in encouraging innovation-

Intellectual property rights (IPRs), granted by patents, copyrights, trademarks, etc., play an important role in fostering innovation and supporting economic growth. These rights allow their holders to exclude, for a limited duration, other parties from the benefits arising from new knowledge and, more specifically, from the commercial use of innovative products and processes based on that new knowledge. The ability to temporarily exclude others from the enjoyment of the potential benefits deriving from innovation contributes to provide the incentive for individuals and enterprises to allocate financial and human resources in research and development (R & D) and other costly activities to build new discoveries, innovative products and production processes.⁶

In the absence of the legal protection granted by IPRs, rival firms and companies would be entitled to free-ride on the successful results of R & D investments, imitating and thereby exploiting commercially new inventions. IPRs also contribute to promoting the dissemination and commercial application of intellectual property. Firms, in fact, can be expected to be more inclined to transfer new technologies and inventions when a sufficient degree of legal certainty regarding the returns from sharing precious innovative ideas is guaranteed. In some cases, even in the absence of IPRs, firms may still be able to exclude competing firms from having access to their innovations. In these cases, IPRs would not be necessary to recover the investments incurred.⁷

However, excluding other firms from sharing know-how is not always possible. Also, a sizeable waste of resources can result from the efforts aimed at maintaining secrecy. In the absence of strong IPRs, an inefficient tendency to allocate resources particularly to those innovative activities which can be more easily kept secret can be expected.⁸

ii. *Intellectual property rights and the tradeoff between allocative and dynamic efficiency-*

IPRs, by granting legal exclusivity, may also grant their

² Vinod Dhall, “Essays on Competition Law and Policy”, available at http://www.cci.gov.in/images/media/articles/essay_articles_compilation_text29042008new_20080714135044.pdf (accessed on 30 March, 2015).

³ Ibid.

⁴ Supra note no 3.

⁵ Vinod Dhall, “Essays on Competition Law and Policy”, available at http://www.cci.gov.in/images/media/articles/essay_articles_compilation_text29042008new_20080714135044.pdf (accessed on 30 March, 2015).

⁶ MassimilianoGangi, “COMPETITION POLICY AND THE EXERCISE OF INTELLECTUAL PROPERTY RIGHTS”, available at <http://www.archivioiceradi.luiss.it/documenti/archivioiceradi/osservatori/intellettuale/Gangi1.pdf> (accessed on 15 March, 2014).

⁷ MassimilianoGangi, “COMPETITION POLICY AND THE EXERCISE OF INTELLECTUAL PROPERTY RIGHTS”, available at <http://www.archivioiceradi.luiss.it/documenti/archivioiceradi/osservatori/intellettuale/Gangi1.pdf> (accessed on 15 March, 2014).

⁸ Ibid.

holders the ability to exercise market power⁹, when similar technologies and products representing viable constraints are not present. Such exercise of market power can result in allocative inefficiencies where owners of exclusive rights will likely restrict output levels compared to more competitive situations, in the markets for the goods and services incorporating those rights. They will do so in order to maximize their profits. However, it has been observed that IPRs, while ensuring the exclusion of rival firms from the exploitation of patented technologies and derived products and processes, do not necessarily confer market power to their holders. In fact, technologies which can be considered, at least to a sufficient degree, potential substitutes do represent effective constraints to the ability of IPRs holders to raise the price of their products above competitive levels. Only when alternative technologies are not available, it can be said that IPRs grant their holders monopolistic positions in relevant markets.¹⁰

The exercise of exclusive IPRs which lead to a monopolistic behaviour resulting in allocative inefficiencies, in the absence of competing technologies and products, may appear contrary to what is generally perceived in most jurisdictions as the main objective of competition policy that is, the protection of the competitive process to ensure an efficient allocation of resources, lower prices and better consumer preference.¹¹

Competition policy, however, recognizes that in some situations, society would be benefitted by allowing for limited market restrictions, monopolistic profits and short-term allocative inefficiencies, when these can be proven to promote dynamic efficiency and long-term economic growth. This tradeoff which has to be looked into by the competition policy makers is clearly a central issue in the interface between competition policy and intellectual property protection where short-term inefficiencies are expected to be the price that society needs to pay in order to receive the reward of long-term economic growth.¹²

However, competition policy certainly plays an important role in limiting the exercise of market power associated with the IPRs, ensuring in particular that such power is

not excessively used as leverage. Thus, competition policy has a role in limiting monopolistic abuses related to the exercise of IPRs. It exercises this role by preventing firms holding competing intellectual property rights from engaging in anticompetitive practices.¹³

1.2 Nature of Competition Policy

The term competition law refers to legislation, judicial decisions, and regulations specifically designed avoiding the concentration and abuse of market power. Competition policy is a broad term, covering all aspects of government actions that affect the conditions under which firms or the companies compete in a particular market. Competition law has emerged as an issue largely because exporting firms in the high-income developed economies argue that anticompetitive practices of competitors in foreign markets hinder their ability to penetrate those markets. Such practices may be largely private in nature and could be facilitated by the absence or weak enforcement of local competition laws.¹⁴

The aim of competition law is primarily to protect the processes essential for efficient and effective functioning of markets. Markets are essentially dynamic in nature and experience the birth of new firms and products, the death of inefficient firms and outdated products, and the natural expansion, contraction, and reorganization of firms. Competition law further recognizes that firms compete in both static and dynamic terms, requiring that some balance must be struck between ensuring competitive access and encouraging innovation.¹⁵

The fundamental purpose of competition law is to ensure that markets are effectively contestable, meaning thereby that incumbent firms are not able to sustain anticompetitive practices for extended periods of time. Such practices include merging with competitors to attain monopoly, refusing to supply goods or to license technologies on market terms in order to prevent competition, and agreeing with other firms to establish collusive restraints on trade. In this context, competition law aims at preventing such abuses by establishing conditions or guidelines under which they would be examined for legality which is difficult in reality. For example, published guidelines differ

¹³ Ibid.

¹⁴ Keith E. Maskus, University of Colorado, Boulder Mohamed Lahouel, University of Tunis III, "Competition Policy and Intellectual Property Rights in Developing Countries: Interests in Unilateral Initiatives and a WTO Agreement" available at <http://siteresources.worldbank.org/DEC/Resources/84797-1251813753820/6415739-1251814020192/maskus.pdf>, (accessed on 30 March, 2015).

¹⁵ Ibid.

⁹ Market power can be defined as the ability to maintain prices above competitive levels for a significant amount of time and profit from such rise in prices.

¹⁰ Supra note no 8.

¹¹ Supra note no 8.

¹² Ibid.

considerably across the United States and the European Union in which practices are viewed as potentially anticompetitive, which practices should be banned outright, and what circumstances should be investigated by authorities for anticompetitive effects. Keeping in mind these complicated critical issues there can be no “ideal” definition or application of competition law.¹⁶

1.3 The TRIPS Agreement, Competition Policy and Intellectual Property Rights

One of the main principles of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) negotiated during the Uruguay Round is the recognition of the role of intellectual property protection in fostering economic growth. The agreement has introduced common minimum standards of protection and enforcement of IPRs in the international trading system which is binding for all member countries. The competitive balances sought to be attained by TRIPS are contained in the objectives and principles.

- First, Members may, in formulating or amending their laws, adopt appropriate measures to prevent the abuse of IPRs, restraint of trade or international transfer of technology.
- Second, is an interpretive principle in favour of adopting measures necessary for prevent monopoly abuse by IPR holders and anticompetitive licensing arrangements, which is put into operation by Article 40 (a *lex specialis* provision to the general provision in Article 8.2), which establishes a regime for controlling such practices.

It is explicitly stated that the protection and enforcement of IPRs should contribute to the promotion of technological innovation and to the transfer and dissemination of technology (Article 7 and 8 of the TRIPS Agreement). IPRs should contribute to the mutual advantage of producers and users of technological knowledge and in a manner favourable to social and economic welfare and to a balance of rights and obligations.¹⁷

These TRIPS objectives and principles which seek to attain competitive balances are provided in Articles 7 and

¹⁶ Keith E. Maskus, University of Colorado, Boulder Mohamed Lahouel, University of Tunis III, “Competition Policy and Intellectual Property Rights in Developing Countries: Interests in Unilateral Initiatives and a WTO Agreement” available at <http://siteresources.worldbank.org/DEC/Resources/84797-1251813753820/6415739-1251814020192/maskus.pdf>, (accessed on 30 March, 2015).

8.2. These Articles set the framework for the TRIPS Agreement and have been lauded as being consistent with developing country interests.¹⁸

Article 40 is undoubtedly the epicentre of the IPR and competition law interface in TRIPS and is seen as a crucial element of the flexibilities available to developing countries. It is also evident from a plain reading of Article 40 that IPR law and competition law are viewed in *pari materiae* and that competition law is seen as the second layer which helps in establishing a balance of rights and obligations relating to IPRs.

II: US and EU perspective on Competition Law and IPR: A Comparative perspective

On the surface, there appears to be much in common between competition law in the United States and competition law in the European Union. Article 81 of the EC Treaty, which prohibits agreements that distort competition, and accordingly, agreements that fix prices is roughly comparable to Section 1 of the US Sherman Act which prohibits agreements in restraint of trade. Article 82 prohibits abuse of a dominant position and seems roughly comparable to Section 2 of the Sherman Act, which prohibits monopolization and attempts or combinations to monopolize.¹⁹

U.S. and EC competition systems also have common objectives. Both seek to advance the interests of consumers and protect the free flow of goods in a competitive economy. Both seek to protect competitors’ access to markets and protect to some extent consumer freedom of choice and seller freedom from coercion.²⁰

¹⁷ Massimiliano Gangi, “COMPETITION POLICY AND THE EXERCISE OF INTELLECTUAL PROPERTY RIGHTS”, available at <http://www.archivioiceradi.luiss.it/documenti/archivioiceradi/osservatori/intellettuale/Gangi1.pdf> (accessed on 15 March, 2014).

¹⁸ Eashan Ghosh, “Competition Law and Intellectual Property Rights with Special Reference to the TRIPS Agreement”, available at <http://www.cci.gov.in/images/media/ResearchReports/EshanGhosh.pdf>, (accessed on April 30, 2015).

¹⁹ ELEANOR M. FOX “US and EU Competition Law: A Comparison” available at http://www.piic.com/publications/chapters_preview/56/10ie1664.pdf (accessed on 28 March, 2013).

²⁰ *Ibid.*

2.1 Similarities and differences between Article 82 of the EC Treaty and Section 2 of the Sherman Act-

Article 82 of the EC Treaty and Section 2 of the Sherman Act are often regarded as similar provisions in that they are both meant to prohibit unilateral conduct which influences a certain market, and have the effect of impairing trade between member States. In both cases the conduct becomes relevant when a certain degree of economic power is involved and in both cases the conduct, although generally adopted by a single undertaking, can also be pursued by more than one firm. Nonetheless, despite these apparent commonalities, several differences can be traced among the two provisions.²¹

A first relevant difference can be found is that European competition laws do not punish conduct aimed at obtaining a dominant position. A finding of dominance is the fundamental point for assessing unilateral abuses; therefore, whatever the means and the strategies implied to achieve it, the mere attainment of a position of dominance in itself will not be punished. Only the abuse of such position can trigger liability under article 82: hence, no attempt claims can be pursued in Europe; not even in the case that clear evidence is provided that the company has engaged in the practice with the specific intent to damage a competitor or competition in general. Indeed, a second substantive difference between the two doctrines is given by the fact that European assessment of unilateral conduct does not take intent into account.²²

Another significant difference with regard to the assessment of abuse and monopolization (or attempt to monopolize) can be found in the defensive tools dominant firms have at their own disposal once their conduct has been found abusive.

Under Article 82 EC Treaty, the firm can defend itself insofar as it can demonstrate that it has taken “reasonable steps as it deems appropriate to protect its interests, provided however that the purpose of such behaviour is not to strengthen this dominant position and abuse it”. Also, a firm might justify its conduct asserting that it has been

forced to undertake such behaviour in order to minimize the losses it would suffer from rivals’ competition. Conversely, under American antitrust law, dominant firms can defend themselves by simply asserting that their conduct is likely to pass efficiencies on consumers and that a balancing of the pro- and anti-competitive effects caused by the practice shows that the latter does not have the ultimate effect of harming consumers.²³

Recently, the European Commission seems to have endorsed a somewhat smoother approach towards so called efficiency defense by asserting that exclusionary conduct may escape the prohibition of art. 82 if the dominant undertaking can demonstrate that its conduct produces efficiencies that outweigh the negative impact on competition. However, while the position of the Commission is not definitive as yet, it should be pointed out that the European defense based on efficiency seems reasonably narrower in scope than its American counterpart.²⁴

Eventually, the last but not least, a significant difference stems from the very same assessment of dominance and the concept of anticompetitive conduct. As mentioned above, American antitrust law has evolved more and more towards the idea of antitrust as a “consumer welfare prescription”. This view has led courts to specifically concentrate on conduct whose effect directly restrains output or increases price, to the immediate detriment of consumers, and to disregard practices that do not directly cause such an effect not distorting of competitive equilibrium. Although actual proof of consumer welfare diminution is not expressly required by the Sherman Act nor by other statutory provisions, an exclusionary conduct will not be punished lacking clear evidence of consumer harm. As a consequence, the concept of anticompetitive conduct entirely reverts to whether the conduct harms consumers, in the sense that it actually diminishes consumer welfare.²⁵

21 Emanuela Arezzo, “INTELLECTUAL PROPERTY RIGHTS AT THE CROSSROAD BETWEEN MONOPOLIZATION AND ABUSE OF DOMINANT POSITION: AMERICAN AND EUROPEAN APPROACHES COMPARED”, at John Marshall Journal of Computer and Information Law Spring 2006 available at <http://international.westlaw.com/result/default.24> J. Marshall J. Computer & Inf. L.455, Westlaw_Document_09_00_00.doc, (accessed on April 15, 2015).

22 Ibid.

23 Emanuela Arezzo, “INTELLECTUAL PROPERTY RIGHTS AT THE CROSSROAD BETWEEN MONOPOLIZATION AND ABUSE OF DOMINANT POSITION: AMERICAN AND EUROPEAN APPROACHES COMPARED”, at John Marshall Journal of Computer and Information Law Spring 2006 available at <http://international.westlaw.com/result/default.24> J. Marshall J. Computer & Inf. L.455, Westlaw_Document_09_00_00.doc, (accessed on April 15, 2015).

24 Ibid.

25 Atlantic Container Line AB and Others v. Commission, Joined cases T-191/98, T-212/98 to T-214/98, [2003] ECR II-3275, p 1113; Emanuela Arezzo, “INTELLECTUAL PROPERTY RIGHTS AT THE CROSSROAD BETWEEN MONOPOLIZATION AND ABUSE OF DOMINANT POSITION: AMERICAN AND EUROPEAN APPROACHES COMPARED”, John Marshall Journal of Computer and Information Law Spring 2006, available at <http://international.westlaw.com/result/default.24> J. Marshall J. Computer & Inf. L.455, Westlaw_Document_09_00_00.doc (accessed on April 15, 2014).

On the contrary, European competition bodies have always regarded consumer's welfare as one important goal of competition policy; however, they have shown equal concerns towards the protection and safeguard of competitive structures of markets and openness. More specifically, while the Commission explains that the protection of competition on the market is ultimately intended at enhancing consumer welfare, it has been clearly stated that competition as an institution must be considered the direct goal of competition rules. In fact, European antitrust law does not require evidence of consumer welfare as further element to prove the abuse. Rather, consumer's damage is presumed whenever the distortion of competition, already caused by the very same presence of the dominant firm on the market, is brought one step further by the abusive conduct.

The next section deals with recent tensions between European and U.S. antitrust officials regarding their respective approaches to Microsoft reflect different legal priorities and principles within the jurisdictions with respect to the refusal to license as an abuse of dominance²⁶.

2.1.1 EU Takes Stricter Approach on Refusal to License

The European Microsoft decision indicates that the Commission is making it more difficult for dominant companies to refuse to license their IP rights. In September 2007, the European Court of First Instance (CFI) affirmed the Commission's findings that Microsoft had abused its dominant position. Microsoft has since announced that it will not challenge this decision and will comply with the remedies and pay the fine of more than EUR 497 million (\$728 million)²⁷.

The Commission found that Microsoft abused its dominant position by refusing to license "interoperability information" to competitors in the work group server operating system market. This interoperability information would enable competing work group server operating systems to function compatibly with Microsoft Windows dominant domain architecture. The Commission found this "interoperability information" was indispensable to enabling non-Microsoft group servers to compete on an

equal footing with Microsoft. Without this information, there was a danger that competition would be eliminated in the group server market where Microsoft already had 60 percent market share. Most controversially, the Commission concluded that the refusal to provide this information limited technical development to the prejudice of consumers. The Commission thus emphasized that lack of access to Microsoft's IP rights would restrict innovation and competition in the work group server market. The Commission added that Microsoft failed to show that disclosing its IP rights would have a significant effect on Microsoft's incentives to innovate.²⁸

Citing European case law, the Commission set out three conditions that must be met for a refusal to license to be an abuse of dominant position which are as follows:

1. the refusal must relate to a product or service indispensable to the exercise of an activity on a neighboring market;
2. the refusal must be of such a kind as to exclude any effective competition on that market; And
3. the refusal must prevent the appearance of a new product for which there is a potential consumer demand.

The Commission concluded that Microsoft's refusal to license its interoperability information met each of these three conditions by restricting competition in the group server operating systems market. According to the Commission, the limiting of technical development in the group server operating systems market was sufficient to meet the "prevention of the appearance of a new product" standard.

In Microsoft, the Commission and the CFI arguably increased the liability for companies that refuse to license IP rights in the EU by allowing the limiting of technical development in the group server market to meet the standard for "preventing a new product" in this market. In some previous refusal-to-license cases a narrower "preventing a new product" standard had been applied.²⁹

For example, in IMS Health, the European Court of Justice (ECJ) denied the Commission's refusal to deal claim because the company that was not granted a license was

²⁶ McDermott, Will and Emery, "IP Licensing and Competition Law – Divergence between the European Union (EU) and United States", available at <http://www.mwe.com/info/news/wp1008a.pdf>, (accessed on March 30, 2015).

²⁷ Ibid.

²⁸ Supra note no 27.

²⁹ McDermott, Will and Emery, "IP Licensing and Competition Law – Divergence Between the European Union (EU) and United States", available at <http://www.mwe.com/info/news/wp1008a.pdf>, (accessed on March 30, 2015).

attempting to use that license to create services that were the same as services already being provided. However, in Microsoft, the CFI rejected Microsoft's argument that competing software providers were not creating new products, but merely wanted to use Microsoft's IP to duplicate Microsoft's work group server operating system software that was already on the market.³⁰

2.1.2 United States takes a more Lenient approach on Refusal to License and Microsoft's Licensing Practices:-

The United States seems to have adopted a more lenient approach to the refusal to license issue in general, and specifically in relation to Microsoft. In the United States even where a patent owner has a monopoly in a relevant market, its refusal to license a patent to others will not generally provide the basis for holding that the patentee has been abusive.³¹ In other words, the authorities take the view that IP rights create a rebuttable presumption that a refusal to license is permissible (absent illegal tying, fraud on the Patent and Trademark Office). In *Trinko*³², the Court recognized that "firms may acquire monopoly power by establishing an infrastructure that renders them uniquely suited to serve their customers" and "compelling such firms to share the source of their advantage may lessen the incentive for the monopolist, the rival or both to invest in those economically beneficial facilities".

Generally speaking, the U.S. courts have held that a monopolist's unilateral refusal to license technology, which has been legitimately protected by patent or copyright, is not a violation of antitrust law. Accordingly, in the U.S. case against Microsoft, the DOJ did not directly challenge Microsoft's refusal to license its IP rights. It is true that, in the area of licensing, the DOJ did successfully challenge Microsoft for putting restrictions on its Windows licenses, which prevented computer manufacturers from installing competing internet browsers. As a result of this ruling, Microsoft agreed to a conduct remedy that included a requirement for it to share its operating system code with competitors for five years, from November 2002 until 2007. Portions of this remedy have been extended and may be extended further, potentially until 2012³³. Despite this,

the U.S. remedy in Microsoft has been widely criticized for being too weak and poorly enforced- it included no fine and no structural remedies.³⁴

Thus to conclude, while in general terms the EU and the U.S. competition authorities have historically taken the same approach to IP licensing, recent cases indicate there is some divergence in how these jurisdictions apply and enforce the law. The Commission and the European courts have tended to be stricter in enforcing competition law in the face of IP rights than their U.S. counterparts. In so doing, European authorities have emphasized the increased competition and ensuing innovation that can result from sharing IP rights while U.S. authorities have focused on the increased innovation that may result from granting and protecting IP rights.³⁵

III: A Lesson for India: A developing country's perspective

The imperatives of "unfettered competition" and "innovation" are indispensable for attaining sustained economic growth. As it has already been seen, the balancing of competition with innovation is an extremely difficult task since there is an apparent tension between the tenets of IP law and Competition policy. While IP law aims at providing protection to the creators and innovators of intellectual work, by conferring exclusivity upon them; competition policy strikes at the 'exclusivity' which hampers free and fair trade.³⁶

This tension between IPRs and competition policy is sought to be resolved by the competition authorities in major jurisdictions such as US and EU. The law in these countries developed and matured over the years

to accommodate the interests of both innovation and competition. However, competition law and policy is in its nascent stage in most of the developing countries and the interface between IP law and competition policy poses a challenge to these nations especially in US, EU and India as discussed. There is also a realization among these countries that innovation is the key for flourishing of the economy. Therefore the primary concern is the precompetitive treatment and exercise of IPRs³⁷.

30 Ibid.

31 *SCM Corp. v. Xerox Corp.*, 645 F.2d 1195 (2nd Cir. 1981)

32 *Verizon Communications v. Law Offices of Curtis V. Trinko*, 540 U.S. 398, 408 (2004)

33 Parts of the remedy, including the requirement for Microsoft to share its Windows protocols with competitors have been extended until 2009; and states are currently petitioning to extend this remedy until 2012.

34 McDermott, Will and Emery, "IP Licensing and Competition Law – Divergence Between the European Union (EU) and United States", available at <http://www.mwe.com/info/news/wp1008a.pdf>, (accessed on March 30, 2010).

35 Ibid.

36 Manpreet Kaur, "The interface between Competition Law and Intellectual Property Rights", available at www.cci.gov.in/images/media/.../manpreet_250908_20080925094525.pdf, (accessed on March 15, 2014).

37 Ibid.

With liberalization, globalization and privatization it was made easier to concentrate on the aspects of competition and innovation equally. Therefore, after 1991, law also kept pace with the shifting economic paradigms as was reflected by the amendments brought about in the MRTP Act. To face the newer challenges posed by a vibrant economy like India, it was important to evolve new strategies of growth while cherishing the ideals of economic democratization manifested in the constitution of India. Then came the Competition Commission of India which was established with the aim of fostering competition, preventing practices having an adverse effect on competition, protecting consumers' interests and ensuring freedom of trade by various participants in the economy.

At the same time, India also developed and accustomed its IP laws to be in conformity with the TRIPS agreement. One can easily infer that equal drive on innovation and competition is a matter economic expediency for India. However, the tussle between IPRs and competition cannot be resolved unless a clear cut policy approach is laid down.

The Competition Act 2003 explicitly points out exceptions in favour of the exercise of intellectual property rights. Section 3(5) of the Act contains the following provision:

Nothing contained in this section shall restrict –

- i. The right of any person to restrain any infringement of, or to impose reasonable conditions, as may be necessary for protecting any of his rights which have been or may be conferred upon him under –
 - (a) the Copyright Act, 1957
 - (b) the Patents Act, 1970
 - (c) the Trade and Merchandise Marks Act, 1958 or the Trade Marks Act, 1999
 - (d) the Geographic Indications of Goods (Registration and Protection) Act, 1999
 - (e) the Designs Act, 2000
 - (f) the Semi-conductor Integrated Circuits Layout-Design Act, 2000
- ii. The right of any person to export goods from India to the extent to which the agreement relates exclusively to the production, supply, distribution or control of

goods or provision of services for such export³⁸.

Section 3 of the Indian Competition Act prohibits anti-competitive agreements between enterprises and lists out the conduct which is deemed to have a harmful impact on competition. Such conduct includes – determining purchase or sale prices, limiting production or supply, allocating geographic markets or product market, bid rigging or collusive bidding etc. However, the exception as created by clause (5) of the section reflects the policy of striking a balance between the legitimate interests of IPR holders and competition in the market³⁹.

The advanced countries and major trading nations like US and EU have taken recourse to tools such as compulsory licensing in order to mitigate the impending perils of abusive conduct of dominant enterprises. The applicability of such a provision in India cannot be precluded since the Indian Patent Act makes an explicit provision for compulsory licensing. This would be more relevant in the field of pharmaceuticals where competition in the generic drugs may be foreclosed by dominant undertakings. Compulsory licences can be used, both in the context of IPRs and of competition laws, to remedy anti-competitive practices. Article 31(k) of the TRIPS Agreement, explicitly provides for the granting of such licences in the case of patents⁴⁰. It is pertinent to mention that the power to enact laws on compulsory patent licensing arises from several international agreements such as the World Intellectual Property Organization (WIPO) Paris Convention for the Protection of Industrial Property⁴¹, the relevant provisions of which were incorporated into the World Trade Organization (WTO) Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS).

TRIPS provide flexibility to the Member States to solve the difficulties resulting in potential conflict between

competition policy and IP law. Articles 8, 31 and 40⁴² deserve a special mention. Members may “adopt measures

38 Manpreet Kaur, “The interface between Competition Law and Intellectual Property Rights”, available at www.cci.gov.in/images/media/.../manpreet_250908_20080925094525.pdf, (accessed on March 15, 2014).

39 Ibid.

40 Carlos M. Correa, “Intellectual property and Competition law – exploring some issues of relevance to developing countries”, available at http://www.iprsonline.org/resources/docs/corea_Oct07.pdf (accessed on March 05, 2015).

41 Paris Convention, Article 5, states that “[e]ach country of the Union shall have the right to take legislative measures providing for the grant of compulsory licenses to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent, for example, failure to work.”

42 The following part of Article 40 is relevant for our purpose -

1. Members agree that some licensing practices or conditions pertaining to intellectual

necessary to protect public health and nutrition and to promote the public interest in sectors of vital importance to their socio-economic and technological development.⁴³

Further, TRIPS handles compulsory licenses as an exception to the agreement's minimum requirement that all Member States afford a patentee a right of exclusivity during the complete patent term. TRIPS lay down a set of circumstances that establish a floor at which any Member State is allowed to issue compulsory license. The compulsory licenses that are allowed fall into two categories—where there is an overriding public interest or where the patent rights are being used in an anticompetitive manner.

In the realm of national laws, following are the examples that specify when compulsory licenses can be issued:

- Refusal to enter into a voluntary licensing agreement on reasonable commercial terms;
- Public interest;
- Public health and nutrition;
- National emergency or situation of extreme urgency;
- Anti-competitive practices on the part of patent holders
- Dependent patents;
- No or insufficient working of the invention in the national territory.⁴⁴

Thus, it is evident that compulsory licensing can potentially combat some of the most pernicious circumstances including anti-competitive practices. India can undoubtedly enact and develop its laws to suit the peculiar requirements. The Competition Commission of India may use the potent tool of compulsory licensing to countervail the harmful effect of IPRs on competition.

property rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology.

2. Nothing in this Agreement shall prevent Members from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market. As provided above, a Member may adopt, consistently with the other provisions of this Agreement, appropriate measures to prevent or control such practices, which may include for example exclusive grant back conditions, conditions preventing challenges to validity and coercive package licensing, in the light of the relevant laws and regulations of that Member. Available at http://www.wto.org/english/tratop_e/trips_e/t_agm3d_e.htm#8 accessed on March 10, 2010.

43 Article 8 of TRIPS.

44 Ibid.

This approach must be subject to the TRIPS provisions which entail that the compulsory license should be issued on the basis of individual merits and the IPR holder must be appropriately remunerated etc. Therefore India can fully use the flexibilities allowed by the TRIPS Agreement to determine the grounds for granting compulsory licences to remedy anti-competitive practices relating to IPRs.

Further, the doctrine of “essential facilities” can be made use of in India to combat abusive conduct of dominant enterprises. Developing countries (like India) may draw interesting lessons from the application of the concept of refusal to deal and the essential facilities doctrine in developed countries⁴⁵.

However, there are no rigid models and developing countries can elaborate their own approaches on the matter in order to respond to their public interests. In countries like US and EU the essential facilities doctrine has been used as a potent tool for granting of compulsory licences so as to allow third parties to have access to IP protected products and technologies. The plethora of case law that has developed in this area throws light on some of the conditions and circumstances under which the doctrine of essential facilities is applied to IPRs. The most frequently enunciated pre-requisites are- refusal to deal without any objective justification; exclusion of competition in secondary market by denying access to essential facilities which are deemed to be industry standards and are indispensable for producing new goods for which there is consumer demand; extending and perpetuating monopoly in other markets in ways different from normal development of monopoly power (example – unlawful tying)⁴⁶.

Under the India law, these could fall within the ambit of Section 4. The Competition Act, 2002 (Section 4) prohibits the abuse of dominance by enterprises. Section However, India can evolve its own principles with regard to application of essential facilities doctrine without dampening the growth of innovation and enterprise. India could also adopt the EU approach wherein the law casts a general duty upon dominant firms to supply the essential facilities to competitors (unlike US). In some cases, even if the facilities are not “essential” the denial of access by a dominant firm is nonetheless scrutinized from the perspective of abusive conduct, considering its impact on competitors in secondary market. The essence lies in

45 Supra note 37

46 Ibid.

adopting the “rule of reason” approach with regard to cases involving “refusal to deal”, which would lend flexibility to the application of essential doctrine. Pertinently, in India, S.4 (2) (e) of the Competition Act is the vanguard for preventing abusive conduct by IP owners and ushering competition in secondary markets⁴⁷.

The recent cases are the *AmirKhan Productions Private Limited v UOI*⁴⁸, the Court ruled that Competition Commission has the power to deal with intellectual property cases. In another case of *Singhania & Partners LLP v Microsoft Corporation (I) Pvt. Ltd.*⁴⁹, the CCI considered the question of anti-competitive behaviour and abuse of dominant position in selling Windows and Office 2007 software. Finally, in *Miromax Informatics Ltd. v Telefnaktiebolaget LM Ericsson (Publ)*⁵⁰, standard setting is the clash between intellectual property and competition law.

In the end, the researcher would like to point out that a set of guidelines for the application of competition laws to intellectual property rights are an indispensable requirement for maintaining an efficacious balance between IPRs and competition policy. The guidelines may be in the form of broad policy objectives or they may be intricately detailed. The most suitable approach would be to synthesize the best features available in various jurisdictions in order to cater to the Indian requirements. Any other gaps may be filled by a case to case approach applying the rule of reason.

IV: Conclusion and Suggestions

At this point the researcher would like to summarize some of the well accepted principles in various jurisdictions –

1. The US approach is that of treating IPRs at par with other property rights. This seems to be a viable option for India as well since it lends simplicity to the application of competition laws.
2. Most of the jurisdictions recognize that the existence of IPRs does not necessarily confer market power. This is a rational presumption and may be adopted by the Competition Commission of India in dealing with cases involving intellectual property rights. The

3. legitimate interests of IPR holders must be taken into account since unbridled exercise of power by the competition authorities may thwart innovation.
4. The premise of IP guidelines could be that competition and IPRs are not at loggerheads. Rather they complement each other in encouraging innovation, efficiency and consumer welfare.
5. The guidelines could list out the anti-competitive conduct of IP owners under a “per se” category. This would enable the holders of IPRs to exercise their rights in a manner which is harmonious with competition policy. If the conduct which is per se illegal and anti-competitive is listed out by the Commission in its guidelines, it may lead to reduction in the number of cases falling foul of the competition laws.
6. The exemption in favour of “agreements in research and development”, on lines of EU exemption may go a long way in encouraging innovation whilst maintaining healthy competition in the market.
7. The definition of market could be bifurcated into markets for goods, services and technology or innovation. This would reduce the complexity and enable the Commission to address situations in which IP is used to charge excessive prices for or prevent access to protected technologies.

Therefore, in case of India also it is necessary for to identify as to whether static efficiency precedes dynamic efficiency or vice –versa. From the researcher’s point of view, it may be analyzed and dealt with on a case to case basis. For example in case of competition in the pharmaceutical sector, both static and dynamic efficiency would matter. Static efficiency matters as the prices of essential drugs must not be manipulated by those having monopoly rights so as to reap unprecedented profits at the cost of public welfare.⁵¹ Thus, the scales may tilt in favour of competition policy. On the other hand, dynamic efficiency is equally relevant so as to encourage innovation in this sector and in such cases the tilt would be towards protection of exclusivity of IPRs so that there remains sufficient incentive to invest in R&D. The challenge in the end is to strike a balance.

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51 Supra note 39

Revisiting Indian Higher Education: Issues, Challenges and Suggestions

Ruchi Arora*

Abstract:

Against the background of current state of Indian Higher Education the present paper identifies the critical issues and challenges that Indian Higher Education sector is facing. Moreover the present paper has also attempted to make certain suggestions so as to overcome these challenges. It is hoped that this paper serves as a clarion call for all stakeholders in India's higher education system to move beyond the limitations of the present and work towards realizing the very real potential for transformation that the future holds.

Keywords: *Indian Higher Education, Current State, Issues, Challenges, Suggestions.*

Introduction

Two observations have to be made at the outset of any statement on higher education in India: First, education, in general, and higher education, in particular, plays a key role in the realization of India's extraordinary potential and aspirations for economic and technological development. Secondly, precisely because of this potential and its implications for individual advancement, there is an extraordinary demand for higher education among India's young.

Five issues – quantity/quality, regulation, privatization, staffing, and studying abroad – form the core of this note on the state and the prospects of higher education in India. Other issues may well be equally critical or even more so; a more encompassing account would certainly have to include such issues as:

- The provision of education, higher and otherwise, to disadvantaged groups in Indian society (the issues of inclusion and affirmative action)
- The quality and relevance of the curriculum in higher education,
- The effect that problems in higher education have on primary and secondary schools, and vice-versa.
- The role of assessment and evaluation in higher

education

- The state of research both within and outside institutions of higher education.

There is, indeed, a multitude of interconnected problems that India faces in its higher education system. At the same time, the gains to be derived from overcoming these problems and from seizing the opportunities of economic and technological development are shown by a recent World Bank study to be tremendous:

The time is very opportune for India to make its transition to the knowledge economy – an economy that creates, disseminates, and uses knowledge to enhance its growth and development ... Tertiary education is critical for the construction of knowledge economies. India currently produces a solid core of knowledge workers in tertiary and scientific and technical education, although the country needs to do more to create a larger cadre of educated and agile workers who can adapt and use knowledge ... Measures are also needed to enhance the quality and relevance of higher education so that the education system is more demand driven quality conscious, and forward looking, especially to retain highly qualified people and meet the new and emerging needs of the economy.

What is at stake for India is aptly captured by the former

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president of the Indian National Science Academy (INSA) and former Director General of the Council of Scientific and Industrial Research (CSIR), Dr. Ragnath A. Mashelkar:

As I see it from my perch in India's science and technology leadership, if India plays its cards right, it can become by 2020 the world's number-one knowledge production center, creating not only valuable private goods but also much needed public goods that will help the growing global population suffer less and live better.

The "if" in this statement suggests a major condition for success; this paper is meant to be a modest contribution to revisit current situation of higher education in India so as to bring forth its critical issues and challenges. Moreover the present paper has also attempted to make certain suggestions so as to overcome these challenges.

The Current State of Indian Higher Education

The current higher education system in India is massive with over 30 million students enrolled across 45,000 institutions.

- The higher education system has grown significantly in the past two decades in terms of the number of institutions and enrollment.
- High quality central institutions have also exhibited strong growth.
- Distance education, which offers affordable education to masses, has grown significantly in the recent past.
- Progress in higher education in India has been driven by several factors such as increasing private participation, international collaborations, increasing industry-academia partnerships, increased government allocation etc.
- Despite the current size, India's GER (Gross Enrolment Ratio) lags that of other leading countries.
- While the higher education system in India has witnessed significant expansion and progress over the past decades, there are some systemic issues that need to be addressed:

(i)	Curriculum & pedagogy	Outdated and irrelevant curricula
(ii)	Faculty	Vacant faculty positions , Inadequate teacher training ,High student- teacher ratios
(iii)	Research	Low focus on research, Lack of industry involvement
(iv)	Partnerships	High quality partnerships with foreign institutions restricted to a few institutions
(v)	Infrastructure	Most institutions not meeting infrastructure norms, Allocated funding for infrastructure development not being utilized effectively
(vi)	Funding	Low government spending on research relative to other countries
(vii)	Governance/Leadership	Multiple regulatory bodies with duplication and ambiguity of regulations.

Table 2

(i)	Social value	There is a wide disparity in the GAR across genders, social groups and regions, with rural areas and minority groups having a GAR significantly lower than the national average
(ii)	Economic value	Employability is a key concern
(iii)	Intellectual value	India lags behind the other BRIC nations in university world rankings and research output/impact

Table 3

Indian Higher Education	Social imperatives	Economic imperatives	Intellectual imperatives
Current State	31 million* enrolment GER: 22.5%* Disparity across states (20 percentage points) and social groups Human Development Index: Ranked 136 amongst 186 countries	Only 10% of general graduates and 25% of engineers and MBAs are employable	Only 4 Indian institutes in the top 400 universities in the world No institutes in the top 200 in the world

Keeping in view the current state of Indian Higher Education it can be concluded that despite many new national missions/programs and reforms agenda, by both the central and state governments with private sector intervention, the Indian higher education sector is in a state of complete flux.

Critical Issues In Indian Higher Education

1. Excellence and expansion: Quantity and quality in Indian higher education

Most observers agree that Indian higher education, the significant and impressive developments of the past few decades notwithstanding, faces major challenges in both quantitative and qualitative terms.

Perhaps the clearest and boldest statement of this issue can be found in the "Report to the Nation 2006" of the National Knowledge Commission which concludes that there is "a quiet crisis in higher education in India that runs deep", and that it has to do with both the quantity and the quality of higher education in India.

Summary Thesis: The qualitative deficits in Indian higher education and the need for a major quantitative expansion represent two major challenges for India, each of which would require an

exceptional effort; to tackle them both at once, as experts and the government agree is necessary, is a particularly formidable task.

2. Regulation and Governance

Besides its quantitative limitations and qualitative deficits, Indian higher education is also considered to be sub optimally organized and significantly overregulated, limiting initiatives for change and stifling or misdirecting private efforts. In its assessment of the existing regulatory arrangements, the National Knowledge Commission concludes: "In sum, the existing regulatory framework constrains the supply of good institutions, excessively regulates existing institutions in the wrong places, and is not conducive to innovation or creativity in higher education." It is not surprising that one of the key recommendations of the National Knowledge Commission, right behind the expansion of the system, is to change the system of regulation for higher education, claiming that "the

system, as a whole, is over-regulated but under governed” and proposing to establish an “Independent Regulatory Authority for Higher Education (IRAHE)” that is to operate “at an arm’s length from the Government and independent of all stakeholders”.

A particularly interesting part of the debate on this issue centers around the need for new forms of governance in Indian higher education, where the focus would be on the twin postulates of Autonomy and accountability. An important step was taken in this regard by the Central Advisory Board of Education (CABE) which set up a special committee to design ways for promoting both autonomy and accountability in Indian higher education. The Committee has come up with a wide range of recommendations in 2005; to judge from the analysis of the National Knowledge Commission cited above; however, no major breakthrough in this matter seems as yet to have been achieved.

Summary Thesis: Both the extent and the nature of the regulatory arrangements appear to inhibit both the reform of Indian higher education and the mobilization of additional (private) resources for its further development. The debate over new forms of governance, especially with regard to the twin issues of autonomy and accountability, is thus of critical importance for the future of the system.

3. The privatization of higher education

One of the striking features of the development of higher education in India over the last few decades has been the extent to which private institutions have entered the scene and attempted to respond to the massive demand for education at the post-secondary level. This is particularly true in the fields of engineering, medicine, and management, and much less at the broader level of university education. The strong emergence of the private sector is reflected in the funding pattern: While the government’s share in overall education expenditure has declined from 80 percent in 1983 to 67 percent in 1999, private expenditure on education has increased more than ten times over the same period. On the other hand, there are persistent and fairly well-documented claims that the existing political, regulatory and judicial context is not at all conducive to the adequate mobilization of private resources and energies for higher education. What has been said above about the constraining nature of the regulatory framework applies particularly to private institutions; the

need for affiliating such institutions to public universities is a case in point. Some particularly critical observers attribute this general reluctance to involve the private sector in higher education to an “ideological commitment to some principle of equality”. Be that as it may, the courts in India have played a rather major role in determining the prospects of private elements in higher education and, even more importantly, in limiting the degree to which public higher education can draw on private resources for its own development.

Summary Thesis: Private initiatives and resources already play a major, if ambiguous, role in Indian higher education. However, a variety of factors appears to prevent the full utilization of this potential for the further quantitative as well as qualitative development of the system.

4. Staffing higher education

Should the ambitious plans of both the public and the private sector for the massive development of higher education in India have a chance to succeed, one of the key prerequisites is a large and highly capable pool of scholars who can provide academic leadership in teaching and research. Many of these scholars already exist or are moving into the ranks of the professoriate at the better Indian (and foreign) universities; many more will be needed to satisfy the growing demand and to take the place of the large numbers of college and university faculty who are not up to the standards of an internationally competitive system of higher education. To judge from the existing analyses of the situation, the achievement of this goal appears to require a combination of several different strategies, including:

- A change in the criteria for academic recruitment and promotion
- Significant improvements in the economic condition of the academic teaching profession,
- A very ambitious program for the identification, training, support and placement of young scholars, and
- A major effort at repatriating successful Indian scholars from abroad.

None of these measures is easy; all of them will have to overcome deficits where standards for academic recruitment have been rather lax or arbitrary, where the

remuneration of teaching in higher education has been rather dismal (compared to opportunities both abroad and in the private sector), where graduate and doctoral programs have been short on capacity, academic rigor, and financial support, and where the increasingly intensive efforts to bring Indian scholars back from abroad have so far met with only limited success.

Summary Thesis: Adequate staffing may well be the critical bottleneck in India's ambitious plans for expansion and excellence. To cope with it will require a concerted effort involving the academic culture; economic conditions, graduate training, and bringing back expatriate Indian scholars.

5. The two sides of studying abroad

Studying abroad, primarily in the United States and the United Kingdom, has played, and continues to play, a major role in expanding and enhancing the pool of qualified Indians. At the same time, this large exodus of young talent has serious drawbacks. A significant portion of these students remain abroad after graduation, and while they often become interesting commercial partners for Indian firms (as in the case of many Indian-led companies in Silicon Valley), their academic talents and experience is largely lost to the task of advancing higher education and research in India. Furthermore, the overall financial drain on India's resources is considerable, and has to be added to the intellectual drain. It is not surprising that an important part of India's strategy for developing its system of higher education is making at least some universities sufficiently attractive to persuade talented young Indians to remain at home, or to return.

A related, but also controversial issue is the interest of a growing number of foreign universities, notably from the US, to set up programs in India to tap into the growing demand for quality higher education. Programs of this kind might obviate the inclination of some young Indians to study abroad; at the same time, there is a good deal of controversy over the financial and regulatory terms under which these programs would be permitted. A pending piece of legislation, the "Foreign Education Providers Bill", is designed to regulate these programs, but a bitter debate has emerged over the effect they would have on access to higher education for less fortunate members of Indian society.

Summary Thesis: As India has entered an increasingly globalized higher education market, the economic and social ramifications of that market are felt more and more clearly. The degree to which, and the terms on which, India opens herself to that market will have a serious and lasting impact on the direction and pace of India's own development in higher education.

Challenges in Higher Education

In present scenario the challenges in higher education are:

- **Demand-Supply Gap:** According to the recent report of HRD ministry, presently about 12.4 percent of students go for higher education from the country. If India were to increase that figure of 12.4% to 30%, then it would need another 800 to one thousand universities and over 40,000 colleges in the next 10 years. Statistics show that there is a huge gap between the demand and supply. The HRD ministry says that the foreign institutions could fill this gap to a large extent. Close to 50 Foreign universities may enter India in near future. But realistically speaking, the foreign institutions could not fill this gap. This is the third attempt being made by government to liberalize education system. Two attempts were made in 1995 and 2006 to bring foreign universities to India. Against the projected requirements, the 11th Five Year Plan provides for a total of 30 new Central Universities (with medical and Engineering colleges), eight new IITs, 20 NITs, 20 IIITs, 3 IISERs, seven IIMs, and two SPA and 373 new colleges in districts with GERs that are below the national GER.
- **Quality Education:** Quantity and quality of highly specialized human resources determine their competence in the global market. According to a recent government report two-third of India's colleges and universities are below standard. However, according to MHRD annual report 2009-10, a proposal for mandatory accreditation in higher education and creation of an institutional structure for the purpose of regulation is under consideration. India's highest-quality institutions have severely limited capacity.
- **Research and Development:** Research and higher education are complementary to each other. According to the available official statistics the expenditure on R&D in the field of Science & Technology as a percentage of gross domestic product (GDP) was 0.8

percent during the year 2005-06 in India. Moreover, India's higher education institutions are poorly connected to research centers. So this is another area of challenge to the higher education in India.

- **Faculty Shortage:** According to a recent report of HRD Ministry premier educational institutes like the Indian Institute of Technology (IITs) and the Indian Institute of Management (IIMs) are facing a faculty crunch with nearly one-third of the posts vacant. According to a report published in IANS around 35 percent posts are vacant in the central universities, 25 percent in the IIMs, 33.33 percent in the National Institute of Technology (NITs) and 35.1 percent in other central education institutions coming up under the Human Resource Development (HRD) Ministry. However in order to overcome this, government is planning to have short-term measures like raising the retirement age in teaching posts from 62 to 65 years and enhancement in salaries and other benefits for teachers. Also some long-term measures have also been initiated for attracting young people to opt for this (teaching) career. These include enhancement in fellowships and attractive start-up grants in various disciplines.

Suggestions for Improving Quality of Higher Education

There are some suggestions and Expectations from Government, Industry, Educational Institutions, Parents and Students for improving quality of higher education-

1. **Towards a Learning Society-** As we move towards a learning society, every human activity will require contributions from experts, and this will place the entire sector of higher education in sharp focus. Although the priorities, which are being assigned today to the task of Education for All, will continue to be preponderant, the country will have to prepare itself to invest more and more on higher education and, simultaneously, measures will have to be taken to refine, diversify and upgrade higher education and research programmes.
2. **Industry and Academia Connection-** Industry and Academia connect necessary to ensure curriculum and skills in line with requirements. Skill building is really very crucial to ensure employability of academia to understand and make sure good jobs (keeping in view knowledge + skills+ global professional skills = good jobs).
3. **Incentives to Teachers and Researchers-** Industry and students are expecting specialized courses to be offered so that they get the latest and best in education and they are also industry ready and employable. Vocational and Diploma courses need to be made more attractive to facilitate specialized programs being offered to students. Incentives should be provided to teachers and researchers to make these professions more attractive for the younger generation.
4. **Innovative Practices-** The new technologies offer vast opportunities for progress in all walks of life. It offers opportunities for economic growth, improved health, better service delivery, improved learning and socio-cultural advances. Though efforts are required to improve the country's innovative capacity, yet the efforts should be to build on the existing strengths in light of new understanding of the research innovation-growth linkage.
5. **To mobilize resources-** The decline in public funding in the last two plan periods has resulted in serious effects on standards due to increasing costs on non-salary items and emoluments of staff, on the one hand, and declining resources, on the other. Effective measures will have to be adopted to mobilize resources for higher education. There is also a need to relate the fee structure to the student's capacity to pay for the cost. So that, students at lower economic levels can be given highly subsidized and fully subsidized education.
6. **Coming of Information Age-** The world is entering into an Information Age and developments in communication, information and technology will open up new and cost-effective approaches for providing the reach of higher education to the youth as well as to those who need continuing education for meeting the demands of explosion of information, fast-changing nature of occupations, and lifelong education. Knowledge, which is at the heart of higher education, is a crucial resource in the development of political democracy, the struggle for social justice and progress towards individual enlightenment.

- 7. Student-Centered Education and Dynamic Methods-** Methods of higher education also have to be appropriate to the needs of learning to learn, learning to do, learning to be and learning to become. Student-centered education and employment of dynamic methods of education will require from teachers new attitudes and new skills. Methods of teaching through lectures will have to subordinate to the methods that will lay stress on self-study, personal consultation between teachers and pupils, and dynamic sessions of seminars and workshops. Methods of distance education will have to be employed on a vast scale.
- 8. Public Private Partnership-** PPP is most essential to bring in quality in the higher education system. Governments can ensure PPP through an appropriate policy. University Grants Commission and Ministry of HRD should play a major role in developing a purposeful interface between the Universities, Industries and National Research Laboratories (NRLs) as a step towards PPP. Funding to NRLs by the government should ensure the involvement of institutions of higher education engaged in research activities to facilitate availability of latest sophisticated equipment. There has been some effort both by the government and the private education institutions to develop the teaching staff at various levels. However, this needs to be intensified with appropriate attention to all the aspects related in order to prepare quality and sufficient number of educational staff. Such efforts need a very serious structuring for the research base institutions. We have to be optimistic that private-public partnership and the Industry interface will take place in the field of education at all levels, and particularly in the backward regions, which is the need of the hour. To achieve excellence, we thus need to create a real partnership between government, educators and industry—Partnerships that can provide our high-tech industries with skilled workers who meet the standards of their industry.
- 9. To Provide Need Based Job- Oriented Courses-** All round development of personality is the purpose of education. But the present day education is neither imparting true knowledge of life and nor improving the talent of a student by which one can achieve laurels in the field one is interested. So, combination of arts subjects and computer science and science and humanities or literature should be introduced so that such courses could be useful for the students to do jobs after recruitment in some companies which would reduce unnecessary rush to higher education. The programme must be focused on graduate studies and research and developing strategies and mechanisms for the rapid and efficient transfer of knowledge and for its application to specific national and local conditions and needs. Meritorious doctoral students should be recognized through teaching assistantships with stipends over and above the research fellowships. Finally, based on knowledge only vision of the future life and work can be had; based on this vision only a broad ambition can be fixed for oneself; and based on this ambition only one can lead interesting life doing satisfying job to do remarkable achievements in some field in the world.
- 10. International Cooperation-** Universities in India have been a primary conduit for the advancement and transmission of knowledge through traditional functions such as research, innovation, teaching, human resource development, and continuing education. International cooperation is gaining importance as yet another function. With the increased development of transport and communication, the global village is witnessing a growing emphasis on international cooperation and action to find satisfactory solutions to problems that have global dimensions and higher education is one of them.
- 11. Towards a New vision-** India realizes, like other nations of the world, that humanity stands today at the head of a new age of a large synthesis of knowledge, and that the East and the West have to collaborate in bringing about concerted action for universal upliftment and lasting peace and unity. In this new age, great cultural achievements of the past have to be recovered and enriched in the context of the contemporary advancement so that humanity can successfully meet the evolutionary and revolutionary challenges and bring about a new type of humanity and society marked by integrated powers of physical, emotional, dynamic, intellectual, ethical, aesthetic and spiritual potentialities.
- 12. Cross Culture Programmes-** After education, tour to all the places in India and world as far as possible with the cooperation of government is necessary so that one can understand about people, culture, arts,

literature, religions, technological developments and progress of human society in the world.

13. **Action Plan for Improving Quality-** Academic and administrative audit should be conducted once in three years in colleges by external experts for ensuring quality in all aspects of academic activities. The self-finance colleges should come forward for accreditation and fulfill the requirements of accreditation. Universities and colleges should realize the need for quality education and come forward with action plan for improving quality in higher educational institutions.
14. **Individuality-** The life of one will not be interesting but rather boring, monotonous and frustrating. This is mainly due to parental interference in the education of the children. Parental guidance is necessary but it should not interfere in the creativity or individuality of the students. Also, in spite of the obsolete type of education system, some are achieving wonderful things in Sports, Music, Dance, Painting, Science and Technology in the world. This is only due to the encouragement of the parents and some dedicated teachers in the educational institutions. Higher education is necessary for one to achieve excellence in the line one is best. But one should be selected for higher education on the basis of merit only. Further, fees for education in general should not be high; especially, the fees for higher studies should be within the reach of every class of people in the nation.
15. **Privatization of Higher Education-** In any nation education is the basic necessity for the socio-economic development of the individuals and the society. In reality only 20% of the population is educated in India. So, improved standard of education as first priority should be offered to the majority by the govt. authorities with sincere political will. Also, privatization of higher education is absolutely necessary in a vast country like India as government alone is helpless to do so.
16. **Quality Development-** Quality depends on its all functions and activities: teaching and academic programs, research and scholarship, staffing, students, building, facilities, equipments, services to the community and the academic environment. It also requires that higher education should be characterized by its international dimensions: exchange of knowledge, interactive networking, mobility of teachers and students and international research projects, while taking into account the national cultural values and circumstances. The level of education and knowledge being imparted by many colleges...is not up to the mark. Instead of concentrating on quantity, these institutions should concentrate on quality. The approach of doctoral research in social sciences needs to be more analytical and comparative and be related to society, policy and economy. A study conducted on Social Science Research Capacity in South Asia (2002) showed that the share of the Indian universities in the special articles published in the Economic and Political Weekly was only about a 25 percent. This too was dominated by only three universities, namely- Jawaharlal Nehru University, University of Mumbai & University of Delhi.
17. **World Class Education-** Indian government is not giving priority to the development of Standard in education. India should aspire for the international standard in education. Many national universities like in the USA, UK, Australia, etc. allow studies in higher education for foreign students in their countries and through correspondence courses as well. In the same way India Universities of world class education can also offer courses of studies to foreign students taking advantage of the globalization process. To achieve that goal it should adopt uniform international syllabus in its educational institutions.
18. **Personality Development-** Finally, education should be for the flowering of personality but not for the suppression of creativity or natural skill. In the globalized world opportunities for the educated people are naturally ample in scope. As a result business process outsourcing (BPO) activities have increased competition in the world trade leading towards the production of quality goods and their easy availability everywhere in the world market. That is the way the world can be developed for peace, prosperity and progress by able and skilful men.
19. **Status of Academic Research Studies-** If we see the number of researchers engaged in Research and Development activities as compared to other countries we find that we have merely 119 researchers, whereas Japan has 5287 and US has 4484 researchers per

million of population. Even in absolute terms, number of researchers in India is much smaller compared to US, China, Japan, Russia, and Germany. Numbers of doctoral degrees awarded in all subjects are 16, 602 out of which 6774 are in Arts and 5408 in science and rest in others (professional subjects). India has a little over 6000 doctorates in Science and engineering, compared to 9000 in China and 25000 in US. It increased rapidly from a little over 1000 in 1990 to over 9000 in recent years in China. In comparison, there has been a modest increase in India. National Science Foundation (NSF) - Science and Engineering Indicators (2002) shows that in the US, about 4% of the science and engineering graduates finish their doctorates. This figure is about 7% for Europe. In India this is not even 0.4%. Data on doctorates particularly in science, engineering and medicine suggests that only a few institutions have real research focus. In engineering there were merely 650 doctorates awarded in 2001-02. Of these 80 percent were from just 20-top universities. In science, 65 percent of the doctorates awarded were from the top-30 universities.

20. Stipends to Research Fellows- The number of PhDs from Indian Universities should increase with proper standards. This should be seen in the context of extremely low fraction of PhDs in India in relation to M.Sc. /B.Tech. As compared to what it is in USA, UK, Germany, Japan etc. Meritorious doctoral students should be recognized through teaching assistantships with stipends over and above the research fellowships Identifying talented, meritorious students and encouraging them through recognition is very important to attract students into research and teaching.

21. Fair Quality Assurance System- Colleges and Private institutes should set up Internal Quality Assurance Cell and must follow a minimum standard to give degrees. The quality assurance system must be independent of political and institutional interaction and it must have a basis in the legislation. There should be operational, financial and academic autonomy coupled with accountability. There is a need of an independent accreditation agency with a conglomerate of government, industry, academia; society etc. means all stakeholders of the education to

ensure that the stakeholders particularly the students are not taken for a ride. They should be able to know whether a particular institution delivers value or not, then things can be under control to some extent. It is also important that all institutes of higher learning must make public the acceptability of their courses and degrees. (i.e. the status, recognition and acceptability of their courses by other institutions).

22. To increase Quantity of Universities- We need more universities because we are more in number and present number of universities is too less. On 13th June, 2005 Government of India constituted a high level advisory body known as National Knowledge Commission (NKC) to advise the PM about the state of education in India and measures needed to reform this sector. It was headed by Sam Pitroda and submitted its report in November 2007. NKC has recommended setting up of 1500 universities by 2015 so that gross enrollment ratio increases to 15 percent. It has also called for establishing an Independent Regulatory Authority for Higher Education (IRAHE) to monitor the quality of overall higher education in India.

23. Examination Reforms- Examination reforms, gradually shifting from the terminal, annual and semester examinations to regular and continuous assessment of student's performance in learning should be implemented.

24. High-tech Libraries- Our university libraries have a very good collection of books, but they are all in mess. A library must be online and conducive for serious study. Indian universities should concentrate more on providing quality education which is comparable to that of international standards.

Conclusion

Considering both the multitude and the magnitude of the difficulties that Indian higher education faces, it would be easy to be overwhelmed by the problems and to despair of finding solutions. At the same time, given the tremendous potential of India's booming industry and technology and the considerable progress made in higher education and research in recent decades, it would also be easy to reach a state of exuberance and expect that, somehow, India will surmount these difficulties. Neither of these two reactions appears warranted on the basis of a sober assessment of the

situation. The problems India faces in higher education and research are, as this paper and other analyses show, very real and very serious; they will not go away by themselves, nor are they amenable to easy and routine solutions. For them to be overcome seems to require not only massive rearrangements in both the provision and the utilization of public as well as private resources, but also profound and durable changes in institutional cultures inside and outside higher education.

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