MANAGEMENT INNOVATOR

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Editorial

MANAGEMENT INNOVATOR

PANEL OF REFEREES

Editorial

India has undergone changes in its economic and technological perspectives over the years. Since demonitisation, there has been a change in economic activities and the lower end of skill spectrum has got to face the wrath of the same. There has been a change in the technology front also with digital payments taking over on a large scale. The introduction of paytm, phonepe et.,. in the digital payments along with digital banking taking a large scale increase has changed the financial sector of the country,

The articles in this edition are focused on the emerging areas of configuration management, telecom management, innovative teaching and human resource management etc.. Each of the article is well researched, thought provoking and provides immense contribution to the body of knowledge. These articles will provide new directions in the field of research. The contemporary research areas like configuration etc.,. have been dealt in detail. I am sure you will find the journal worth in terms of academic and research outputs and I expect suggestions for improving the standards of this journal.

Thanking you

Dr.K.S.Chandrasekar

Chief Editor

AUTHOR GUIDELINES AND ETHICAL CONSIDERATIONS

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An Overview of the Factors Influencing Strategy Implementation Process

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 Abstract:

The current study seeks to provide an in-depth explanation of the factors that have an influence on strategy implementation process. Previous studies, textbooks and relevant academic articles have been reviewed for the purpose of conducting this study. Based on extensive review of literature, it has been concluded that strategy implementation process is influenced by the following factors: strategy communication, organizational leadership, organizational culture, organizational structure, resource allocation, staff training and organizational rewards.

Keywords: Strategy, Process, Strategy Implementation

INTRODUCTION

Due to the rapidly changing business environment and the increased competition, there is an immense pressure for the organizations to adopt mechanisms to survive and succeed in the marketplace. Strategy implementation is a critical competitive mechanism for accomplishing the desired goals and objectives and achieve a superior performance. Turbulent business environment, technological impact, globalization, increasing customer demands, and rigid rivalry are factors that drive organizations to embark on strategic implementation practices (Manktelow & Carlson, 2014).

Muguni, (2011) argues that the implementation method is devastating to all managerial activities including activities such as rewards, encouragement, management evaluation and control processes that include flowing strategy across all functional areas in order to achieve the desired goals and improve policy implementation.

According to Andresen and Gary (2010), organisations in the execution of their plans seem to face difficulties. Some scholars, for example; (Marginson, 2012; Lares-Mankki, 2014; Koske, 2013) identified a number of challenges in the implementation of the strategy: weak and poor management positions in implementation, lack of or inadequate communication, lack of awareness or comprehension of the strategy, lack of commitment to the strategy, unaligned organizational resources and processes, poor coordination of work.

Strategy implementation is critical since its rate of accomplishment or failure has a significant impact on the organization's performance and continuity. The major drawback with implementation of the plan is the speed at which the proposed strategy is accomplished. It can sometimes be as small as 10 per cent in academic research (Judson, 1991).

In given the appalling facts; implementation of the strategy seems to be less trendy. A variety of administrators expect implementation in depth as a strategic perspective along with a simple downward strategy. As an alternative, companies are more focused on formulating strategies. This paper highlights the different factors influencing strategy implementation process.

METHODOLOGY

Objective

To provide an in-depth explanation of factors that have an influence on strategy implementation process.

Data collection:
This study is based on secondary data taken from previous studies, textbooks and relevant academic articles.

Strategy Implementation
Implementation is the action stage of the strategic management process and is considered as the hardest and most dynamic stage where employees and managers are all involved. The aim of implementation is to unite the entire organization behind strategy and include all divisions in the organization although it should be initiated by top management but it will succeed if the employees are fully involved (Musa, 2014). Strategy implementation is a major component of the strategic management process. Organizations invest much more effort, time, and resources in the formulation stage of strategic management process than the implementation and control of the strategy. (Hr ebiniak, 2006).

Strategy implementation consists of a series of sub-activities that are mainly administrative in order to determine how organizational resources should be deployed to achieve strategy plan in a cohesive manner (Mintzberg et al, 2002). Ogaja and Kimiti (2016) claim that many of Kenya's public universities failed to implement well-thought-out strategies. Literature suggests that numerous studies agree that strategies frequently fail not because of the insufficient implementation of tactics, but because tactical decisions are not implemented properly.

Converting strategic plans into activities and results tests the capacity of a manager to guide organizational change, inspire staff, create and improve organizational skills and competitive strengths and establish and maintain strategy (Thompson Jr & Strickland III, 1989). Strategy must be institutionalised in order to be applied effectively. In other words, it must permeate the organization's day-to-day life (Pearce II & Robinson Jr, 1991).

Figure 1: Factors Influencing Strategy Implementation Process

Strategy Communication and Strategy Implementation
The implementation of a good strategy is not given the same attention as the formulation of a strategy (Scholey 2005). Though some companies have good and solid strategies, they achieve a disappointing result and that is because those strategies are not implemented and put in action. A strong strategy with no implementation has no value. Here lies the importance of strategy communication where strategy is to be communicated and understood by employees. After then employees could be able to implement it effectively.

According to Cocks (2010), strategy communication makes things clear in the sense that employees know what they are supposed to achieve as individuals and as teams, measure performance against their targets, provide feedback on that performance and reward based on the outcome. If a company does not convey its status and future plan to all its staff, and employees do not receive and acknowledge the communication, this will build knowledge differences leading to failure in strategy execution (Mwanthi, T. N. 2018).

Organizational Leadership and Strategy Implementation
Leadership style as described by Wang, Chich-Jen, and Mei-ling(2010) is the strategy, process, and skill shown by a leader who aims to make followers accomplish organizational objectives and impact organizational activities. The management sector, as described by Magutt (2011), is dominated by two main leadership styles, transactional and transformational leadership styles.
Mel chorita (2013) suggests that strategic leadership is a strategic move to achieve success in organisation. In the changing business climate, managers ' desire to have unique qualities to influence workers can contribute to increased organizational efficiency. Using a mix of implementation styles such as cooperative, procedural, freestyle, goal-setting implementation and walking around implementation can promote progress in an organization (Maina, 2012)
Heracleous (2000), defined various roles that leaders perform during the strategy implementation process and listed them as a commander (a leader who tries to formulate an optimal strategy), an architect (a leader who tries to plan the best way to implement a strategy), a planner (a leader who tries to include other managers in a strategy, a coach ((a leader who seeks to include everyone in the attempts to execute the strategy) and a premise-setter (a leader who invites other managers to come forward as champions of sound strategy).
Bourgeois and Brodwin (1998), described a number of leadership styles adopted by leaders during the implementation of the strategy, and found that leadership approaches to the implementation of the strategy range from being an autocratic leader to a more participatory style requiring active involvement of various stakeholders in the implementation process. Ling et al.
 Teece (2014), emphasized the importance of leadership styles by suggesting that a leader must have the superior skills required to perform high performance through detecting, capturing, and transforming. A strong leadership skill is an essential strategic attribute needed to drive superior performance in organizations operating in today's dynamic environment.
Thompson and Strickland further (2007) stated that strategic leadership keeps organizations innovative and responsive by taking special plans to nurture, nourish and support people who are willing to champion new ideas, new products and product applications.

Organizational Structure and Strategy Implementation
Organizational structure refers to grouping tasks and jobs within an organisation into divisions and bringing them together so that organizational objectives can be accomplished (Nelson and Quick, 2009; Weihrich, Cannice and Koontz, 2008; Dubrin, 2009). Studies show that the relationship between the various units or departments of an organization and different levels of strategy significantly affects the outcome of execution of the strategy (Al – Ghamdi, 1998; Chimhanzi and Morgan, 2005; Hunger and Wheelen, 2007).
Strategy should precede structure, according to Chandler (1962) and Gupta (1987) as quoted in Hunger and Wheeler (2007). This will ensure that the organization's embraced structure allows the workers of the company to interact and perform tasks faster. Studies by Odhiambo et al.

(2005) have conducted in Kenya and concluded that the structure of local authorities resulted in conflicts between those institutions ' executive and legislative arms resulting in reduced organizational performance due to slacked service delivery.

Organizational Culture and Strategy Implementation
Organizational culture refers to the values, beliefs and procedures that govern the actions of employees at work. Borrowing from the culture and effectiveness model of Denison (1990), the role of culture in the execution of a strategy becomes evident. The four cultural characteristics (involvement, continuity, adaptability, and mission) are combined in a nuanced way that determines human capacity, duty, and sensitivity to both internal and external environments, thus creating a perfect formula for execution of strategy.
According to EGESSA, R. K. W. (2012), Organizational culture will often tolerate transition as it tries to maintain stable relationships and behavioural patterns. As a consequence, care should be taken when implementing strategy to determine the consistency of the strategy–culture connection. Community as a necessity for executing a strategy cannot adopt a strategy unless it is compatible with the existing culture.

Resource Allocation and Strategy Implementation
Technological, physical, human, and financial resources are the types of resources needed for organizations to achieve successful goals. During the implementation of the strategy, the huge challenge is insufficiency of any sort of resources such as scarce funding, equipment and facilities, and skills and experience with the human resources. Sometimes it would be appropriate to train, organize, hire, pick, lay off some workers and likely encourage some of them to be able to achieve the strategic goals of the companies. Furthermore, argued that the capacity to create and maintain productive teams is another important part of the plan execution. concluded that application of the plan could be hampered by the employment relationship (Mailu, R. N.et al).
Hence, sufficient resources should be distributed during the strategy implementation stage. That is in the form of technology, physical resources, human, and finance. They all needed for strategies to be accomplished and succeed. Better the resource management, higher will be the level of success and then leads to better results and outcomes.

Staff Training and Strategy Implementation
With an appropriate organizational structure in place, the organization should ensure that it has individuals with relevant knowledge, skills and attitudes to implement the strategies chosen. This requires that employees be properly selected and utilized (Hunger and Wheelen, 2007; DuBrin, 2009). Where in the organization the requisite skills are missing, the company can source for them outside the organization or implement a training program to achieve the chosen goals.
Schaap (2006) found that senior managers trained in strategic planning and implementation were more likely to achieve the company's performance objectives. Training of staff can also be seen as a major requirement for implementation of the plan. Research by the US Department of Labour (1993) showed better performance by companies with training programs than those without. Kodjo and Dai (2009) analysed 320 companies in Ivory Coast further and concluded that investment in training as a necessity to execute the plan, employee career management and alignment with organizational objectives were the main drivers of organizational success.

Odongo and Owuor (2015) reported that employee training is a process where an individual's existing knowledge, visibility and overall performance skills are improved. Training is an organized increase in knowledge— how skills and sensations that staff members need to execute effectively in the offered process, and how to operate in the underlying situation. Flavián and Guinalíu (2015) argues that satisfied employees are likely to adapt more easily to changes compared with dissatisfied employees.

Organizational Rewards and Strategy Implementation

Strategy implementers should be sufficiently compensated to allow them to maximize shareholder capital through selected strategies to be followed and realized. Different reward schemes were proposed. These include stock options where employees are given an opportunity to buy stocks from the company thereby rendering them co-owners and incentive and rewards where good achievement of strategic goals generates extra cash compensation (Pearce and Robinson, 2008).

Others include non-cash incentives such as recognition, honours, prizes (Armstrong, 2006), opportunities for growth and promotions for officers whose units succeed in the execution of strategies. This recognition of the performance and commitment of workers allows them to perform to the best of their ability and align their actions with the achievement of strategic goals (Pitts and Lei, 2008).

Previous studies on the relationship between organizational incentives as an imperative policy implementation and organizational success have defined different forms of intrinsic and extrinsic rewards that an organization can offer to its workers, and how such rewards affect performance. According to Oluyeye (2011) and Doina (2011), 41 incentives provided during the implementation process of the plan have a positive effect on performance of the organisation.

Studies in private firms in Pakistan conducted by Oluyeye (2011) found that there was a significant correlation between extrinsic rewards such as wages and employee morale and reduction in turnover intentions, improved employee productivity and overall organizational success. Other research by Anvari et al (2011) and Khan, Farooq and Ullah (2010) showed that intrinsic incentives had a positive and significant impact on participation and efficiency of the organizations. To them, incentives which enhance the self-esteem of employees, challenge employment and recognition fulfilled a psychological contract of employees resulting in the employee's reciprocity in terms of affective organisational commitment and performance.

Conclusion

This study is an attempt to identify the factors that have an influence on the strategy implementation process. The study concluded that strategy communication, organizational leadership, organizational culture, organizational structure, resource allocation, Staff training and Organizational rewards play a crucial role in determining the effectiveness of strategy implementation process. It is recommended that organizations need to pay more attention towards the strategy implementation process and the factors influencing its success in order to achieve the desired goals and objectives.

References

-Akhtar, S., Arif, A., Rubi, E., & Naveed, S. (2011). Impact of Organizational Learning on

Organizational Performance: Study of Higher Education Institutes. International Journal of Academic Research, 3(5), 327-331.

-Al Ghamdi, S. (1998) Obstacles to successful implementation of strategic decisions: The

-Andresen, N., & Gary L. (2010). Business Process Automation: Transforming the Enterprise by Automating Access to Information, Customers, and Communications. White Paper, Dataquest, Inc., June.

-Anvari, R., Amin, S.M., Seliman, S., Ahmad, U.N., and Garmsari, M. (2011): The relationship between strategic compensation practices and affective organizational commitment, Interdisciplinary Journal of Research in Business, Vol. 1 Issue 2, PP 44 055.

-Armstrong, M. (2006): A Handbook of Human Resource Management Practice, London: Kogan page.

-Bourgeois, L. & Brodwin, D., (1998). Linking planning and implementation. Wit, B. de/Meyer, R. 682-691. British experience, European Business Review 8(6) pp 322-327.

-Chimhanzi, J. and Morgan, R.E. (2005) Explanations from the marketing/ Human resources dyad for marketing strategy implementation for effectiveness in service firms; Journal of Business Research, 58 pp 787-796.

-Darin, A. (2009): Management: concept and cases, New Delhi: Cengage Learning.

-Denison, D. (1990), Corporate Culture and Organizational Effectiveness. New York: John Wiley.

-EGESSA, R. K. W. (2012). Strategy implementation imperatives as determinants of organizational performance in Local Authorities in the Western Region of Kenya (Doctoral dissertation, Moi University).

-Flavián, C. & Guinalíu, M. (2015). Consumer trust perceived security and privacy policy: Three basic elements of loyalty to a website. Industrial Implementation& amp, 106 (5):601 –620.

-Heracleous, L. (2000). The role of strategy implementation in the organization development. Organization Development J., 18(3): 75-86.

-Hrebiniak, L. (2006). Obstacles to Effective Strategy Implementation. Organizational Dynamics, 35(1), 12-31.

-Hunger J.D. and Wheelen, T.L. (2007): Essentials of Strategies Management, 4ᵗʰ Edition, New Delhi: Prentice Hall.

-Judson, A.S. (1991). Invest in a high- yield strategic plan, Journal of Business Strategy, Vol. 12 pp.34-9.

-Kaplan R. S & Norton D.P (1992). "The Balance Scorecard –measures that drive performance" Havard business review Vol 70 (1) pp 71-79.

-Khan, K. Y. Farooq, S. U. and Ullah, M. I. (2010): The relationship between rewards and Employee motivation in commercial banks in Pakistan, Research Journal of International Studies, Issue 14 pp. 37 – 52.

-Kodjo, E. J. and Dai, C. (2009) HRM practices and organizational performance: An empirical Analysis, International Journal of Business and Management, Vol. 4 No. 8. pp. 117 – 127.

-Lares-Mankki, L. (2014). Strategy Implementation Bottlenecks: Identification, Analysis and Removal. Lappeenranta University of Technology, Lappeenranta. Learning.

-Lucey, T. (2013). Management information system (9th ed.). Bedfore Row, London: Pearson Press limited.

-Magutt, J.(2011) Kibaki, Transformational leader? Management, a KIM Publication, August.pp 64-65.

-Mailu, R. N., Ntale, J. F., & Ngui, T. K. (2018). Strategy implementation and organizational performance in the pharmaceutical industry in Kenya. International Academic Journal of Human Resource and Business Administration, 3(2), 33-47.

-Maina, A. (2012). Managing change at the National bank of Kenya Ltd, MBA Research Project,School of the Business University of Nairobi, Kenya. The University of Nairobi. Retrieved from Google Scholar on21stMarch 2018.

-Manktelow, J., & Carlson, A. (2014). The McKinsey 7S Framework -Strategy Skills from MindTools.com.

-Marginson, D. E. W. (2012). Management control systems and their effects on strategy formation at middle management levels: Evidence from a UK organization. Strategic Management Journal, 3, 1019-31.

-Mbaka, R. M. & Mugambi, D. F. (2014). Factors affecting successful strategy implementation in the water sector in Kenya."IOSR Journal of Business and Implementation, 16 (7).61-68.

-Melchorita, S. S. (2013). The Influence of Strategic Implementation Practices and 59 Competitive Advantage on the Organizational Performance of Higher Education Institutions. International Journal of Social Sciences and Entrepreneurship, 1(1), 56-72.

-Mintzberg, H., Lampel, J., Quinn, J. B., & Ghoshin, S. (2002). The strategy process: Concepts,Contexts and cases. Prentice Hall.

-Muguni, N. M. (2011). The role of executive development in strategy implementation. Unpublished MBA Project, University of Nairobi.

-Musa, E. H. (2014). Strategy implementation at Kenya Urban Roads Authority, Unpublished MBA Research Project University of Nairobi.

-Mwanthi, T. N. (2018). Linking Strategy Implementation with Organizational Performance in Kenyan Universities. Kabarak Journal of Research & Innovation, 5(2), 27-49.

-Neely A. (2005). "The Evolution of Performance Measurement Research Development in the last decade and a research agenda for the next" International Journal of Operations and Production Management, Vol 25(12) pp 1264-1277.

-Nelson, D.L. and Quick, J. C. (2009): Organization Behaviour, New Delhi: Cengage Odhiambo, M., Mitullah, W. N. and Akivaga, K. (2004) Management of resources by Local authorities: The case of Local Authority Transfer Fund in Kenya,Nairobi: Claripress

-Odongo, M. & Owuor, D. (2015). Effects of Strategic Planning on Organizational Growth. (A Case Study of Kenya Medical Research Institute, Kemri). International Journal of Scientific and Research Publications, 5(4) 1-19.

-Ogaja, C. K. & Kimiti, G. K. (2016). Influence of Strategic Leadership on Implementation of Oluyeye, F. A. (2011): Reward Economics and Organization: The Issue of effectiveness, AfricanJournal of Business Management, Vol. 5(4) pp. 1115 – 1123.

-Pearce, J. A. and Robinson, R. B. (2008): Strategic Management: Formulation, Implementation and control, New Delhi: Tata McGraw Hill.

-Pitts, R. A. and Lei, D. (2006): Strategic Management: Building and sustaining Competitive Advantage, 4th Ed. New Delhi: Cengage Learning. Research (IJSR), 5(1), 681-689.

-Ridley, Diana. (2012). The Literature Review: A Step-by-Step Guide for Students. Second edition. London: Sage Publications.

-Schaap J. I. (2006). Towards strategy implementation success: An empirical study of the role of senior level leaders in the Nevada Gaming Industry. UNLV Gaming Research & Review Journal, 10, pp 13-17.

-Scholey, C. (2005), Strategy maps: a step-by-step guide to measuring, managing and Tactical Decisions in Public Universities in Kenya. International Journal of Science and Teece, D.J. (2014). A dynamic capabilities-based entrepreneurial theory of multinational enterprise. Journal of International Business Studies 45, 8-37.

-Thompson Jr, A. A., & Strickland III, A. J. (1989). Strategy formulation: Tasks of the General Manager. Pearce II, J. A., & Robinson Jr, R. B. (1991). Strategic Management: Formulation, implementation and control. New York: Irwin.

-Thompson, A. A., Strickland, A.J., & Gamble, J. E. (2007). Crafting and Executing Strategy Texts and Readings. (15th Ed.). New York: McGraw-Hill Irwin. US Dept of labour (1993) High Performance work practices & firm performance, Washington DC: US dept of labour, office of the American Workplace.

-Wang, F., Chick – Jen, S., Mei – Ling, T. (2010): Effect of Leadership style on Organizational performance as viewed from HRM strategy, African Journal of Business Management, Vol. 4(18) pp. 3924 – 3936.

-Weihrich,H., Cannice, M. and Koontz, H (2008):Management: A global and Entrepreneurial perspective, New Delhi: McGraw Hill.

Management Of Innovations In Telecom Industry In India

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Abstract
Innovation is the process and repercussions of creating new items having some value. Innovation originates with recognition of new ideas or elements, beneficial for commercial outcomes. Innovation is the competence to transform by embracing new products, processes, marketing and organization, and stimulated by one agency. Relative Advantage, Compatibility, Complexity, Trialability and Observability are the hallmarks of Innovative technology. Telecom is the science of conveying information utilizing electromagnetic waves. Telecom has yielded abundantly for human advancement. The Digital Divide is ascribed to lopsided access to telecom services. Year 2020 shall be eventful with 5G spectrum allotment.
Keywords: *Innovations, Telecommunication, Industry, Management, Digital Divide*
Introduction
Innovation is the process and repercussions of creating new items having some value. Innovation originates with recognition of new ideas or elements, beneficial for commercial outcomes. Innovation is the competence to transform by embracing new products, processes, marketing and organization, and stimulated by one agency. Telecom is the science of conveying information utilizing electromagnetic waves. Telecom has yielded abundantly for human advancement. The Digital Divide is ascribed to lopsided access to telecom services. Year 2020 shall be historic with 5G Mobile services.

 Innovation can be incremental, disruptive, architectural or radical. Innovation incorporates systematic collection of impulses, creativity of employees, appraising the possibility of the innovation idea, superb team work, project positioned approach and potential to manage projects, liaison with external experts, inclination to take risks, motivation of the employees boost the products and operation of the complete company, persistent education of the employees, and the potential of the company to sponsor the innovation activities. There are four Innovations classifications. Product Innovation is a good or service which is novel or appreciably enriched. This includes impressive improvements in technical specifications, components and materials, software in the product, user friendliness or other functional attributes. Process Innovation is new or notably revamped production or delivery procedure with remarkable refinements in techniques, equipment or software. Marketing Innovation is a virgin marketing method with important variances integrated in product design, packaging, placement, promotion or product pricing. Organization Innovation is a contemporary organizational strategy in business practices, workplace or in a firm's external relations. Innovation is inevitable perpetually. The drivers of innovation are Financial pressures to reduce costs, Increased efficiency, Increased competition, Shorter product life cycles, Value migration, Stricter regulation, Industry and community needs for sustainable development, Increased demand for accountability, Demographic changes, Social and market changes, Increasing customer expectations regarding servicing and quality, Changing economy, and Greater availability of potentially useful technologies.

The Innovation Theory of trade cycle was proposed by Schumpeter, who contemplated innovations as the causation of trade cycles. Innovation is the commercial utilization of inventions to physical production by manipulating inventions. When internal changes occur owing to innovation, the development process commences. Innovation does not emerge involuntarily, requires stimulation by an agency in the economic system. Relative Advantage, economic or non-economic, is the degree to which an innovation is considered finer to prior innovations satisfying the same needs. It is positively associated with acceptance. The sub-dimensions include economic profitability, lesser initial cost, lessening discomfort, savings of time and effort, and propinquity of reward. Compatibility is the extent to which innovation is consistent with current values, past experience, habits and needs of potential adopters, and includes socio-cultural standards and notions. Complexity is the level to which an innovation seems difficult to apprehend and practise. Triability is observed as the grade to which an innovation may be undertaken on a limited footing, and is the ability of adopters to attempt an innovation on installment basis, re-invention, and the ease of trying. Observability is the proportion to which the effects of an innovation are ocular to others, and is the intricacy in observing & describing.

Government of India had promulgated 2010-2020 as the decade of innovation, for inclusive growth in all areas, and established National Innovation Council, State Innovation Councils and Sector Innovation Councils. Department of Telecom chartered Telecom Sector Innovation Council to resolve various aspects of innovation in Telecom Industry, and submitted a report resultantly.

Telegraph was introduced in India in 1851 and Telephone in 1881. The earliest form of communication was physical, later came smoke alerts and drums to convey messages. Written mail, telegraph, telex and telephone facilitated men to disseminate faster. Now radio, television, email and internet are indispensable. Today the inventions will expedite the pace of innovation. Dynamic customer options and surged usage of services had crushed the revenues from traditional voice sources. The amazing growth in data traffic has not culminated in proportionate hike in revenues, despite boosting the costs for upgrading network bandwidth. Telecom companies had to address operational efficiencies, network optimization, revenue streams and customer experience. Telecom Industry is forced to innovate, through the use of strategic partnerships and reposition the business, or broaden its ambit into new markets. Telecom Operators have adopted different models at variant places, seeing the need of the consumers. Indian Telecom rates are considered the lowest. The vastly expanded and improved telecom services have contributed remarkably to the Gross Domestic Products of India.

National Telecom Policy – 2012 (NTP-2012) envisaged many Innovation objectives. 1. To promote Innovation, indigenous Research & Development and manufacturing to serve Indian and International markets, enhancing skills and competencies. 2. To establish an appropriate regulatory framework for imparting Value Added Services at affordable price, to encourage advancement in entrepreneurship, innovation and delivery of distinct content in regional languages. 3. To enhance and evolve National Institute for Policy Research, Innovation and Training, Ghaziabad, as an institute of international status, for capacity raising and facilitating research in India centric technologies and policies in telecom field. 4. To initiate a dedicated centre of innovation, for R&D, exclusive training and development of applications in the field of IPv6.

The major Telecom Innovations are: 1. Innovations in Digitalization, computerization and miniaturization 2. Innovations in Mobile Communication, Internet and Next Generation Networks. 3. Innovations associated with Information and Communications Technology, to create new processes and products to build the information society. Innovation is considered as a great contributor to the nation's wealth. Telecom Industry has a tremendous growth, requiring higher penetration in the rural areas in mobile phones and broadband connections. This demands innovations in telecom products, services and solutions. DOT constituted Telecom Sector Innovation Council, which suggested focus areas of Connectivity to remote rural areas, Value Added Services, Securing networks, Green technologies and Innovative solutions, health care, Tele-education, mobile banking and financial inclusion, Quality of Service, CRM systems, Telecom Business domain, Broadband expansion, Internet Protocol Television and Triple Play services.

A disruptive innovation generates a new market and value network, displacing established leading firms, products and alliances. They target on execution of their existing strategy. Disruptive innovation requires aiming at new technology curve and markets disregarded by the large companies. Disruptive innovations include Internet, Voice over IP, Integration with content service providers, Internet of Things, Mobile, Artificial Intelligence, Machine Learning and Cyber Security. Reliance Jio announced a business innovative from 5th September 2016. This had a major influence on Indian Telecom Industry, with data tariffs descending from 200 Rupees to less than 5 Rupees per gigabyte. This disrupted the consumer behaviour and accorded the masses a legitimate sense of Digital India.

Global Innovation Index (GII) is an annual ranking of nations by their capacity and success in innovation, among 126 economies, formed on 80 indicators, stretching from intellectual property filing rates to mobile-application formation, education expenditure and scientific & technical publishing. It is built on subjective and objective data, extracted from several origins, with International Telecommunication Union, World Bank and World Economic Forum. GII is applied by corporate and government officials to correlate countries by their degree of innovation. GII is determined by extracting a simple average of the scores in Innovation Input Index and Innovation Output Index, composed of five and two pillars. Each pillar depicts an attribute of innovation, and covers up to five indicators. The GII score is determined by the weighted average mode. India had GII scores of 81 in 2015, 66 in 2016, 60 in 2017, improved to 57 in 2018. The top ten are Switzerland, Netherlands, Sweden, United Kingdom, Singapore, USA, Finland, Denmark, Germany and Ireland.

Statement of the Problem
Telecommunication is an essential ingredient of economic and social development in an excessive knowledge concerted global domain. India has to perform a constructive role to mandate accelerated, impartial and extensive economic growth by safeguarding special emphasis on bringing lucrative and marvelous telecommunication services. NTP-2012 targets at inspiring research and development, design in competitive technologies, products and services for satisfying the infrastructure requirements of internal and international markets, with a thrust on security and green technologies. Government of India has honoured the recommendations of TRAI on Approach towards Green Technologies, and directed to seize measures to green the Telecom Industry, foreseeing carbon belittling, utilizing superior and reliable energy efficient equipments, and exploiting renewable energy technologies to a spectacular immensity.

Objectives of the Study

India has been capitalizing on ICT for the well-being of the residents. Optical fiber is drawn out to the distant hamlets in India, advancing high speed internet connectivity at modest rates. Mobile services unfurl the power of remote portage of Government amenities and instructions to the common man. Mobile Internet furnishes new avenues to the citizens to link with the Government and more organizations. Telecom Industry scores for a glaring chunk of the carbon footprint. Guidelines for Green Telecom should reckon ground realities concerning usage and onus of diesel, as an origin of energy. Sub-optimal spectrum allocations direct to more sites and excessive diesel usage. A spectrum policy that secures sufficient spectrum can trounce this barrier. Targets for widening Renewable Energy Technologies are to be made less firm by DOT. An apt study is vital for deploying solar cells for powering Mobile Base Transceiver Stations, expediting site sharing. Target for Carbon Emission is to be dictated on the basis of per unit traffic basis to incorporate voice and data. Green Passport benchmarks are to be appraised with Global Standards. The objective of the present study is to identify the factors, pertinent to organizational context, which influence the Management of Innovations in Telecom Industry in India, incorporating Green Practices and Environmental Accounting, to enhance revenue and reduce expenditure, for the economically viable operations and survival of the stake holders.

Methodology of Study

This is a fact finding study and is descriptive in essence. The study examined the past research works on Management of Innovations in Telecommunication on Green Practices & Environmental Accounting. This paper is evolved on review of literature and secondary data compiled from various websites, circulars, Annual Reports, magazines, newspapers, journals and reference books.

Current Indian Telecom Industry includes telephone, Internet and television broadcast. The plan outlay for telecommunication swelled from Rupees 50 million in 1951-52 to Rupees 14,000 million in 1987-88, a surge of 280 times, and the number of telephone connections soared from 82,985 to 34,87,908 (Balashankar, 1998, p.29). Indian Telecom Industry has inflated from under 36 million subscribers in the year 2001, to over 846 million subscribers in year 2011, and 1,175.88 million as on 30th November 2019. Overall Tele-density in our nation is 88.90, with Rural Tele-density of 56.69 and Urban Tele-density of 157.33. Tele-density in Kerala state is a phenomenal 124.69, below 148.61 of Himachal Pradesh and 238.06 of Delhi. Indian Telecom Industry is the second largest, next only to China in number of telephone subscribers. Call tariff in India is contemplated as the lowest in the world, eased by gigantic telecom operators, and antagonistic competition among them.   As on 30th November 2019, our country has 1154.59 million Wireless subscribers, 21.29 million Wire line Subscribers, and 661.27 million Broadband Subscribers (Telecom Regulatory Authority of India [TRAI], 2020, p.1).

Figure-1 Wireless Subscribers in India on 30.11.2019

Figure-2 Wire less Subscribers in Kerala on 30.11.2019

Figure-3 Telephone Net Addition in India on 30.11.2019 (Total: 1,175.88 Million)

Green Practices is a sustainable economy and society, with zero carbon emissions, a position of exploiting all energy demands from renewable resources. A low-carbon economy, originates less carbon, and is perceivable from a green economy. The impact of Innovations in Telecom is observed on all aspects of Green Practices directly or indirectly. Renewable energy restricts

traditional sources of energy, like oil, natural gas, coal and nuclear power. The renewable energy involves solar electric, solar thermal, wind, geothermal, biomass, batteries, etc. Energy Efficiency incorporates smart grid, energy efficient appliances, and superior building and construction technologies. Green Construction is retrofitting of prevailing buildings and structures, construction of novel buildings, and research in forthcoming construction technologies. Energy Trading merchandises establishment and exchange of economic products, and centres on financial services and solutions. Carbon Capture and Storage are technologies that snatch the excessive greenhouse lessen the exploitation of virgin resources, conserve energy, and palliate pollution in our surroundings. Environmental Protection is pivoted on foiling degradation and reinstating areas that have been dilapidated already. Agriculture and Forestry constitutes finding sustainable, efficient ways to resort to land and other natural resources to ensure that these systems are augmented and left usable for our emerging generations. In Water Management, sustainable water utilization, reuse, and restoration are prescribed to dissuade notable devastations. In Research, Design and Consulting Services, Engineers, Scientists and other professionals, like marketing consultants, nil waste manufacturing consultants, green architects are called for to evolve the new generation technologies, systems and designs, to assure a sustainable future for our generations in store. For Regulatory Administration more professionals are essential to guide complex government interventions. Consumer Products encompasses consumer goods that are organic, energy efficient, biodegradable, recycled, natural, and mandate that these products are accessible at fair prices. Researches by environmental consultants for telecom network operators in Europe, Australia and Canada have unveiled that the use of ICTs to dematerialize physical products, services and processes could pop up in appreciable trimmings in energy and material usage, with collateral dilutions in greenhouse gas emissions. Replacing paper bills by email, appreciable utilization of Tele-work arrangements and virtual audio or video conference meetings in the public and private concerns, systematic use of personal vehicles utilizing ICT-enabled pooling and split ownership, individualized public transport instead of traditional travelling practices of engaging personal vehicles, are examples. Umpteen ICT-enabled inceptions confer to green growth through climate change palliation and accommodation. These changes will give a lot for the blooming of green economy and sustainable development. IoT will broaden the ambit of the current Internet to circumscribe objects in the natural environment and those forged by the human beings. These widespread networks will be established on satellite and terrestrial communication systems, on wireless, and engage radio frequency identification technologies and smart sensors to promote communication among people, objects and information resources across the earth.

Results and Discussion
Management of the Human Resources in Telecom Industries is indispensable. The study is intended to lend inputs for the constructive management of Telecom Industry, with accent on Environmental Accounting and Green Practices. Monetary stimulations endure to play a notable role in preserving the personnel active and energetic. The current research, handled in the four major Telecom Industries, proffers precious insights into the role of Management of Innovations in Telecom Industry, espousing Green Practices and Environmental Accounting, will succour to restrict the consumption of non-renewable resources, to enhance revenue and reduce expenditure, for the economically viable operations and survival of the stake holders.

Table-1 BSNL VRS-2019 in India (Total & Percentages)

In India	Total		Group-A		Group-B		Group-C		Group-D		I/W	
Total	153,786	%	7,211	%	37,785	%	86,757	%	21,390	%	643	%
Eligible	104,471	68	5,661	79	11,971	32	71,007	82	15,302	72	530	82
Opted	78,569	51	4,295	60	9,010	24	54,994	63	9,936	46	334	52
Rejected	25,902	17	1,366	19	2,961	8	16,013	19	5,366	25	196	30
Balance	75,217	49	2,916	40	28,775	76	31,763	37	11,454	54	309	48
Total 50+	25,912	17	1,366	19	2,961	8	16,023	19	5,366	25	196	30
Total 58+	8,403	6	353	5	693	2	6,362	7	916	3	79	12

Table-2 HR Data (Mobile: 1154.58, Fixed: 21.29, Broadband: 661.27 Millions)					
Organisation	Mobile	Fixed	Total Staff	VRS Opted	Balance HR
MTNL	3,381,458	3,167,728	18,422	14,387	4,035
BSNL India	117,598,444	9,837,569	1,53,786	78,569	75,217
Vodafone Idea	336,257,324	389,783	13,520	-	13,520
Airtel	320,383,358	4,309,784	13,000	-	13,000
Reliance Jio	369,933,852	1.023,681	12,000	-	12,000
BSNL Kerala	10,928,286	1,677,609	9,387	4,596	4,791
Vodafone Kerala	18,552,272	5,250	469	-	469
Airtel Kerala	5,557,018	62,983	300	-	300
Reliance Kerala	8,623,730	12,107	420	-	420

Conclusions

Telecom has a spectacular cultural, social and economic influence on the perpetual society. The Digital Divide is due to the lopsided access to telecom services. The present study, in four major Telecom Operators in India, provides precious sagacity into the role of Management of Innovations in Telecom Industry to make the business economically viable. Attempts were made to evaluate Innovations, espousing Green Practices and Environmental Accounting. Telecom subscribers must rely on other individuals and organizations they handle online, and verify that their confidentiality and other statutory rights are preserved. Introducing environmental accounting and friendly measures for sustainability can be effective only if all the participants are fully devoted to it. Our Globe has limited resources that will get drained, if we imbibe them faster than their natural generation. The green business practices and entrepreneurship can be effective, only if we acclaim and fulfil the laws of earth, and earnestly associate with environmental accounting and the alerts for environmental preservation, considering the interest of the ensuing generations.

References

Balashankar, R. (1998). *Golden Era of Telecommunications 1947-1997.* New Delhi: Government of India.

Department of Telecommunications. (2019). *Annual Report 2018-19.* Retrieved from https://dot.gov.in/sites/default/files/Annual%20Report-2018-19%28English%29.pdf

GSM Association. (2020). *Energy Efficiency: An Overview.* Retrieved from https://www.gsma.com/futurenetworks/wiki/energy-efficiency-2/

Telecom Regulatory Authority of India. (2020, January 16). *Press Release No. 09/2020.* Retrieved from https://main.trai.gov.in/sites/default/files/PR_No.09of2020.pdf

Employee motivation as strategy to Indian economic development: Implications for Counselling

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Abstract:

This study was conducted to show how employees motivation could be increased through counseling which leads to economic development in India. The meaning of economic security and motivation were highlighted. Theories of motivation such as Maslow's Need, Hierarchy theory, Reinforcement, Expectancy, Equity and Two Factor theories of motivation were highlighted. Factors related to employees' motivation such as self-esteem, intrinsic motivation tendency and need for achievement were examined. Ways to enhance high self-esteem such as work-shops, experience with success and supervisor behavior were discussed. The various ways Indian employees could be motivated were adequately discussed. They include regular payment of wages and salaries, increase in salary, adequate selection and placement based on aptitude, interest and ability, reward for excellent performance, etc. The counseling implications of the above and how they contribute to economic, development in India were properly highlighted.

Keywords: *Employee motivation, economic security, counseling, self-esteem.*

INTRODUCTION

Labour is the prime mover in the production process. Thus no production of goods and services can take place without human effort. Even in the present era of technological advancement, human labour is indispensable in the operation and use of computers and other machines for the production of goods and services in the various sectors of the economy. Employees constitute a segment of the labour force of an economy. According to Crowther (1995), an employee is a person who works for somebody or for a company in return for wages. In this paper we shall construe employees as all the workers both in the private and public sectors of the economy. Madu (2012), observes that employees are made up of workers serving in either the public or private sectors. He further stated that employees range from the highest class of chief executives to the lowest class of office messengers or gatemen.

Concept of Economic Security

Economic development refers to protection and enhancement of trade industry and wealth creation. Economic development is not attained by the possession of money alone. It is attained by the services one renders or the products one sells for useful products and services which may be converted into all forms of human needs with or without the use of money. Based on the above postulation, Indian Economic development and indeed that of any nation is essentially dependent on the productive capacity of its employees.

Scholars have defined motivation from diverse perspectives. According to Colman (2003:464) "motivation is a driving force or forces responsible for the initiation, persistence, direction and vigour of goal- directed behavior", Colman states that it includes biological driver such as hunger, thirst, sex and self-preservations and also social forms of motivation such as need for achievement and need for affiliation.

Apparent in the above definition is that motivation is the instigating force that causes someone to initiate an action and compels the individual to be persistently committed towards the achievement of the desired goal. Plotnik cited in Onukwufor (2012:22) states that motivation refers to the various physiological and psychological factors that cause us to act in a specific way at a particular time. There are two types of motivation. They are intrinsic and extrinsic motivation.

Intrinsic motivation originates within a person. Thus people are intrinsically motivated when they engage in an activity, because of their own interest in the activity, see it as a challenge or an enjoyment. Examples of intrinsic motivation include: eating good meals, listening to music, spending good time with friends, and having a hobby. Extrinsic motivation originates in factors outside the person. People are extrinsically motivated when they engage in an activity as a means to an end or for tangible benefits. The activity might be for money reward, grades, recognition, to avoid punishment or to fulfill obligation.

Generally industrial psychologists define work motivation as the internal force that drives a worker to action as well as the external factors that encourage that action (Locket Latham, 2002). An organization can secure active participation of an individual by offering him inducements which contribute in some way to the satisfaction of at least one of his goals. The inducements are referred to as motivation which consists of the forces that drive behaviour towards certain goals (Nweke in Madu, 2012).

Statement of the problems

Employee motivation is indispensable in every establishment. If employees are not motivated they tend to show less interest in the production process. In India there are infrastructural constraints such as bad roads, irregular electricity supply, protests from environmentalists, political instability, black money etc. The above situations tend to constitute economic risk for India. It therefore becomes necessary to ascertain how employees in India could be motivated through counselling to put in their best in the production process in order to enhance economic development in the country.

THEORIES OF MOTIVATION

Some researchers have propounded theories to enhance our understanding of how people are motivated. The five major theories which will be summarized in this chapter include: Maslows' need-hierarchy theory, Skinners reinforcement theory, Vroom's expectancy theory, Adam's equity theory and Herzbergs two-factor theory.

Maslow's Needs Hierarchy

Maslow (1954, 1970) believed that there are five major types of needs and that they are hierarchical in nature. This means that the lower-level needs must be satisfied before an individual will be concerned with the next level of needs. The needs include: Basic biological need like food, water and shelter; safety needs include: physical and psychological (job security) safety. The next is social needs such as developing friendships. The next is ego needs (esteem needs) such as recognition and success: While the highest is self-actualization needs.

The extent to which the basic and security needs of employees in India are being satisfied is subject to our individual evaluation. Maslow was of the view that employees would be motivated and satisfied with their jobs at any point of time, if their basic needs are met.

Skinner's theory

In his own theory, Skinner (1953) was of the view that those employees' behaviours that lead to positive outcomes will be repeated, while behaviours that lead to negative outcome will not be repeated. The theory means that behaviours that are reinforced (rewarded) will be repeated or learned by the employee while behaviours that are punished will not be repeated by the individual.

Vroom's Expectancy theory

Vroom's theory is based on the belief that employees effort will lead to performance and performance will lead to rewards. Rewards may be either positive or negative the more positive the reward the more likely the employee will be highly motivated. Conversely, the more negative the reward, the less likely the employee will be motivated (Lindner 1998).

Herzberg's two-factor theory

Herzberg (1966), categorized motivation into two factors namely: Hygiene factors and motivation. Hygiene or extrinsic factors include pay and job security while motivator or intrinsic factors include: achievement, growth, interesting job etc.

According to Herzberg, only the presence of both motivators and hygiene factors can bring job satisfaction and motivation (Aamodt 2007).

Adam's Equity theory

The theory states that employees strive for equity between themselves and other workers. Equity is achieved when the ratio of employee output over inputs is equal to other employee output over inputs (Adams, 1965). Equity theory is based on the premise that our levels of motivation and

job satisfaction are related to how fairly we believe we are treated in comparison with others. This has implication for wage differential policy in India. A situation where people who have the same qualification and put in equal effort but are not rewarded equally. For example, Professors working in government and aided colleges and professors working in self financing colleges in India, Inputs in the theory include, effort, time, education while output includes pay and benefits. Employees divide the output level with the input level and compare same with that of other workers elsewhere.

FACTORS RELATED TO EMPLOYEES MOTIVATION

Researchers have found three individual difference characteristics that are most related to employee motivation. They include: self-esteem, an intrinsic motivation tendency and need for achievement.

Self-Esteem

According to Aamodt (2007:301) "self-esteem is the extent to which a person views himself as valuable and worthy. Similarly, Coppersmith cited in Brehm, Kassin and Fein (2005) defined self-esteem as positive or negative assessment or evaluation of oneself. Korman (1976) submitted that employees high in self-esteem will be more motivated and will perform better than employees low in self-esteem. Korman in his consistency theory posited that there is positive correlation between self-esteem and performance. This implies that employees who feel satisfied about themselves are motivated to perform at work than employees who do not feel that they are valuable and worthy people. In addition, research by Illardi Leone, Kasser, and Ryan (1993) found significant relationship between self-esteem and motivation. Also, in a meta-analysis by Judge and Bono (2001), they found a significant relationship between self-esteem and job performance.

Strategies for increasing employees' self-esteem

Since researches have shown that employees' self-esteem and motivation cum performance are positively correlated, it therefore becomes imperative to improve the employees' self-esteem. Aamodt (2007) has identified the following as ways of increasing employees' self-esteem;

- ✓ **Self-esteem workshop:** During the work-shop, employees are given insights into their strengths. Exposure of employees to some of their unidentified strength is capable of raising their self-esteem as it helps them realize that they are valuable persons. Such identified positive attributes can as well be shared with others during the workshop. The counsellor is better disposed to organize such a workshop.

- ✓ **Experience with success:** In experience with success approach, an employee with low self-esteem is given a very easy task which he will very easily succeed in doing. This success experience increases the employee's self-esteem which subsequently increases performance.

✓ **Supervisor Behaviour:** Another way of increasing employee self-esteem is to train supervisors to communicate a feeling of confidence in an employee: Implicit in this approach is that if an employee feels that a manager has confidence in him, his self-esteem will increase which leads to increase in his performance. This process is known as the Pygmalion effect and has been demonstrated in various situations such as elementary school classrooms, the workplace, courtrooms and the military (Rosenthal, 2002).

The training needed by the supervisor or the manager in order to be able to communicate the feeling of confidence in an employee will obviously be given by a counsellor through the process of counselling. Golem effect occurs when negative expectations of an individual cause a decrease in that individual's actual performance (Davidson and Eden, 2000). In a study by Greenhause and Badin (1974), subjects who were led to believe they would perform well on a task did so, and subjects who were led to believe they would perform poorly on a task also did so.

Intrinsic Motivation

People tend to perform well when they are intrinsically motivated because they either enjoy performing the actual tasks or the challenge of successfully completing the task. This means that some people love challenging tasks. Research findings tend to suggest that people perform better in tasks and are more creative when they are intrinsically motivated than when they are extrinsically motivated (Amabile 1996). Researchers further observed that when people are being paid for something they enjoy doing; they may reduce their satisfaction and intrinsic motivation (Mosshelder, cited in Aamodt 2007 and Lepper et al cited in Onukwufor 2012).

Need for Achievement and Power

Employees who have a strong need for achievement are motivated by jobs that are challenging and over which they have some control, while employees who have minimal achievement needs are more satisfied when jobs involve little challenges and have a high probability of success. On the other hand, employees who have need for affiliation are motivated by jobs in which they can work with other people or help other people at work. These type of people are often found in people-oriented service jobs than in management administration (Smither and Lindgren, 1978).

Researchers have also found that employees who have strong need for power are motivated by a desire to influence others, than to be successful. McCleIland and Burnham cited in Aamodt (2007) in their research finding reported that employees who have strong need for achievement and power often make the best managers. The counselling implication of this is that during interview for the employment of managers in an organization the counsellor should identify candidates who have the need for achievement and power for employment as managers. This may result in high level of performance for the company in terms of profit maximization and economic security of the firm. The need for achievement, affiliation and power are usually measured by Thematic Apperception Test (TAT).

Employees' values and expectations

Every employee in an enterprise has value and expectations to be satisfied in a place of work. Thus, the employees work motivation and job satisfaction are determined by the discrepancy between what we require, value and expect and what the job actually provides for the employee. For example, if the employee enjoys working with people, while the job involves working with data, the employee may not be motivated or satisfied by the job. Another example is an employee who likes moving about while his work involves sitting at a place like the bank cashier, the person may not be satisfied.

Discrepancy between what the employees want and what the job offers them affect the extent employees will be motivated and satisfied with their jobs (Knoop, 1994). For example, if Peter values money while John most values flexibility. If both of them are employed in a company that pays well, but have set hours and a standard routine, in this regard, Peter may be more motivated than John.

It is therefore necessary for the counsellor to ascertain the employee's values and wants so that they could be properly placed. These enhance the employee's job motivation, optimal performance and economic security.

In order for employees to be motivated to perform their jobs, it is imperative for employers to fulfil promises made to the workers. This is because employees compare what the organization promised to do for them and what the organization actually does. For example, the firm may promise to provide free accommodation or furnished offices for the employees. If the organization does not accomplish such promises, the employees may be less motivated to work and will retaliate by working less than they promised (Morrison and Robinson, 1997). This has implication for the counsellor to counsel the employers of labour not to make promises they cannot fulfill. Unfulfilled promises can lead to strikes, work to rule and workers working below their ability. The above situations constitute great threat to the progress of the organization. Unfulfilled promises to workers have indeed caused series of strikes in Indian, especially on public sectors.

Goal setting as a strategy to increase motivation

Goal setting involves specifying minimum productive output or behavioural expectation to be achieved by each employee. Thus, in order to increase motivation, goal setting should be used. The goal given to each employee may include: increase in attendance, increasing the quantity of output produced, reducing grammatical errors in reports and increase in the quantity of outputs sold. Researchers have found goal setting to be effective in diverse situations.

Motivation of Indian Employees towards production

In order for Indian employees to be motivated to show interest in their jobs, employers need to be counselled to adopt the following strategies:

1. **Regular payment of wages and salaries:** The Indian employees may be motivated to perform their jobs more effectively when the payment of their wages and salaries is constant. A situation where the employee is not sure of when to receive the next income is most discouraging

to the employees. The discontentment is most pronounced when the employee is owed for about two to five months. Teachers in some states of the federation are the worst victims of irregular payment of salaries and this has adversely affected the educational sector of the Indian economy in the form of strikes and lack of devotion to duty.

2. **Increase in salary:** Employees in India may be motivated when their salaries are increased. This is because increase in salary will mitigate the current economic hardship being encountered by many employees in India. The economic hardship could be attributed to the recent withdrawal of petroleum subsidy by the Federal government of India. Hence, productivity in India may increase if employees are extrinsically motivated with salary increase. It may enhance economic security in the country as the workers may be happy to put in their best.

3. **Adequate job selection and placement based on attitude, interest, ability and skills.** The counsellor plays a significant role in selection and placement of employees based on aptitude, interest, ability and skills. In a situation where employees are recruited and placed based on the stipulated characteristics, it makes the job more exciting and less cumbersome. This leads to increase in productivity and enhances economic security of the establishment and that of the country.

4. **Sufficient rewards for spectacular performances through bonuses, honours, promotions and commendations:** If the employees are reinforced for excellent performance through the stipulated processes they tend to be motivated and perform even more exceptionally. The above is based on Skinner's theory which states that employee's behavours that lead to positive outcomes will be repeated and behaviours that lead to negative outcomes will not be repeated.

5. **Provision of training facilities to improve employee's knowledge and performance in the establishment:** If in-service training is provided for employees, it helps them to increase their skills on the job which leads to increase in productivity in the organization and contribute towards economic security. Employees feel motivated when they received free training from their employers.

6. **Participation of employees in goal-setting and decision-making process of the establishment:** If the employees are involved in goal-setting and decision-making process of an organization, it enables the employees to be committed towards the achievement of such goals.

7. **Provision of conducive working environment:** Employees will feel motivated to work if their working environment is conducive. Thus air-conditioners and fans should be provided in offices. Offices should be well furnished and painted. Necessary tools required for production processes in factories should as well be provided.

8. **Provision of incentives:** Employees feel motivated in their place of work if they are provided with fringe benefits such as: vehicle loans, free medical facilities, free accommodation or suitable allowance for it, free transport through payment of transport allowance or provision of staff bus.

9. **Provision of recreational facilities and canteen services.** There is the aphorism that all work without play makes Jack a dull boy. Thus it becomes imperative for employers to be counselled on the need to provide entertainment such as table tennis, lawn tennis and more importantly, canteen services should be provided, if not free, at a highly subsidized rate. Canteen services energize the employee for additional productivity.

10. **Scholarship for employee's children:** The employees may be further motivated if their children are offered scholarship up to the University level.
11. **Provision of information and communication network:** Since the world is a global village, it becomes imperative that computer and internet facilities be provided for employees to enhance their communication to the outside world.

12. **Travelling:** Travel could be considered as part of the ways to motivate an employee for excellent performance. The travel could be provided at the expense of the organization either within or outside India maybe for two weeks of relaxation.

13. **Interesting work:** Employees are motivated with interesting work. This makes them to like doing the job.

If through counselling, the employers of labour in India decide to adopt the above measures or some of them as motivation technique to their employees, there will be increase in productivity in India and this will guarantee economic development of the nation.

Benefits of Employee Motivation

1. Increased rate of output and quality of output. When the employees are motivated, it leads to increase in the quantity and quality of output produced. This is because the motivation results in greater personal effort and devotion on the part of the employees.

2. Employee motivation culminates in reduction of grievances and industrial disputes between employers of labour and their employees. This enhances productivity and economic security in the country.

3. Employee motivation reduces the rate of employees exit and absenteeism in the organization. This is because motivation leads to job satisfaction and causes the employees to be loyal to their employers, which minimizes management problems.

4. Employee motivation tends to mitigate the inherent problem of capitalism in the production process which is endemic antagonism between the owners of means of production (capitalists and the labour (employees) over produce (output) distribution.

Implication for Counselling

1. In-service training. The counsellor in conjunction with the manager or director of the organization is to organize in service training for the employees. The training could be within the

establishment or outside. The in-service training enables the employees undergoing it to acquire additional skills and knowledge to enhance their productivity. There is need for the counsellor to counsel the employees to make good use of the opportunity offered them.

2. The counsellor has a significant role to play in the provision of conducive environment, because it includes interpersonal relationship within the establishment. Counselling should be focused on good manager and employee relationship as well as employer and employee harmonious relationship. It is only when there is a peaceful relationship among the human beings working in an organization, that the environment can be conducive for production process. The counsellor should ensure that opportunity is created for social interaction from time to time.

3. Counselling managers, supervisors to serve as role models. Usually employees tend to look up to their supervisors/ mangers to set the pace for desirable work behaviour. If the supervisors or leaders are corrupt, as it is with many Indian supervisors or leaders, the subordinate workers are likely to emulate the behaviour of the so called "model" (Madu 2012). It therefore becomes necessary to make the supervisors and managers to realize how their behaviours could affect other employees of the establishment.

4. Counsellors should counsel the establishment's managements to utilize positive reinforcement as a source of motivation rather than negative reinforcement.

5. It is imperative to counsel the employers of labour not to make promises they cannot fulfill to the employees. This is because unfulfilled promises tend to reduce employees motivation and productivity.

CONCLUSION

Since the success of any organization is dependent upon the effective mobilization and utilization of the effort of all the employees who constitute the work force, the need for the management to motivate the employees cannot be over emphasized. When the employees are motivated, they tend to put in additional effort in production process. Increase in productivity in the country leads to economic security. Counselling of the employers and employees plays a significant role towards the achievement of increase in productivity which leads to economic security.

References

Aamodt MG (2007). Industrial/Organizational psychology: An Applied Approach. Belmont, CA: Thomson Higher Education.
Adams JS (1965). Inequity in Social Exchange in L. Berkowitz (ed.), Advance in Experimental Social psychology. New York: Academic Press.
Amabile TM (1996). Creativity in context. New York. Westview.
Brehm SS., Kass SL and Fein S (2005). Social Psychology. Boston: Houghton Mifflin.

Colman AM (2003). A Dictionary of psychology. New York. Oxford University Press.

Crowther J (1995). Oxford Advanced Learner's Dictionary (5th ed.). Oxford: University Press.

Davidson OB and Eden D (2000). Remedial Self-fulfilling Prophecy: Two field experiments to prevent Golem effects among disadvantaged women. J. Appl. psychol. 85(3):386-398.

Greenhalls JH and Badin IJ (1974). Self-esteem, performance, and satisfaction, performance and satisfaction. Some tests of a theory. J. Appl. Psychol. 59:722-726.

Herzberg, F. (1966). Work and the Nature of Man. Cleveland: World.

Ilardi BC., Leone D., Kasser T and Ryan RM (1993). Employee and supervisor ralings of motivation. Main effects and discrepancies associated with job satisfaction and adjustment in factory setting. J. Appl. Social Psychol. 23(21):1789-1805.

Judge TA and Bono JE (2001). Relationship of core self-evaluation traits-self-esteem, generalized self efficacy, locus of control and emotional stability – with job satisfaction and job performance: A meta analysis. J. Appl. Psychol. 86(1): 80-92.

Knoop R (1994). The Relationship between importance and achievement of work values and job satisfaction. Perceptual motor skills. 79(1): 595-605.

Korman AK (1976). Hypothesis of work Behaviour revisited extension. Academy of Management Review. I, 50-63.

Linder JR (1998). Understanding Employee Motivation. J. Extension. 36(3).

Locke, E. A and Latham, G.P. (2002). Building a Practically useful theory of goal setting and task Motivation. American Psychologist, 57(9) 705-717.

Madu OC (2012). Nigerian Employers and Employees. http:/nigerianobservernews.com

Maslow AH (1943). A Theory of human motivation. Psychol. Rev, 370-396.

Morrison EW and Robinson SL (1997). When Employees feel betrayed: A model of how psychological contract violation develops. Academy of Manage. Rev. 22(1):226-256.

Onukwufor JN (2012). Fundamentals of Social Psychology. Port Harcourt: Sambros Printing Press.

Rosenthal R (2002). Covert Communications in Classrooms, Clinics, countrooms and cubicles. American Psychologist. 57(11): 839-849.

Skinner BF (1953). Science and Human Behaviour. New York. Free Press.

Stajkovic AD and Luthans F (2001) Differential effect of incentive motivators

HRD CHALLENGES FACED BY INDIAN BANKING SECTOR

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Abstract: Service sector is the backbone of banking sector and one among the biggest employer in India. Its wide network coverage spread among all over India and it has a diversified workforce of different origins and profile combined under one roof. This point out the essentiality of different HR practices to tackle the situation effectively and efficiently to exert their maximum potential. It begins with the last era of 20th centuary by the changes made in the area of globalization, liberalization and technological advancement, which leads to face various threats & opportunities in business. The globalization results in tough competition to public sector banks in connection with private sector banks. At that point, they realized the importance of innovative HRM as well as HRD practices to exert their efficiency and performance improvement; which were only adapted by the private sector banks at that period. To meet the defined objectives, they identified the workforce challenges and possible opportunities to mould their roles and responsibilities. The banking sector in India continuously enduring shift in terms of staff composition, their training programmes and cross cultural values. Such kind of diversified human resource will be a challenge for the banking sector.

Keywords: Banking Sector, HR Practices, Globalization, Liberalization, Technological advancement.

I. INTRODUCTION

Banking sector plays an important role in connection with our Indian Economy. From the initial stage onwards it has undergone major changes and it is vital to know about the phases it covers to know the timeline events in an industry. The Indian banking scenario focuses on all resources, which should be efficiently and effectively exploit to achieve a win-win status. For extended endurance, it is essential that the banks should focus on cost savings, which intended for profit maximization (Akansha, 2017).

The Indian banking system can be classified in to three phases namely pre independence phase or phase 1(before 1947), phase 2 (1947-1990) and phase 3(1991 and beyond). In the third phase, we can see the major objectives as explanation of banks with liberalization and economic policies; and the end result will be its outstanding development in those areas. The Narasimhan committee (1991) made recommendations for the entry into banking system of private sector players. A third round of bank licensing took place during 2013-14 and the RBI proposed that two types of banks be set-up, namely payment banks and small banks (Gaurav, 2010).

India currently has 96 scheduled commercial banks (SCBs), 27 public sector banks, 31 private banks and 38 foreign banks, comprising a combined network of 63000 branches and 59000 ATMs. Public sector banks take up 75% of the banking industry's total assets and private and international banks share 18.2 and 6.5 percent respectively (RBI, 2018)

Figure 1.1: Scheduled Banking structure in India
(As included in the Second schedule of the RBI Act., 2002)
Adapted from RBI Research & Data

AN OVER VIEW OF INDIAN BANKING INDUSTRY

India has a diversified banking structure, which has been characterized by three major bank classes, via public sector banks, private sector banks and foreign banks, and a large branch of networks. Moreover, proactive regulatory and supervisory policies, global standards in banking practice, pursuit of corporate and operational efficiency, combined with a wide range of process and procedural reforms, which have enhanced Indian banking system's capacity for sustainable growth (Thomas, 2017).

The Indian banking industry showed a greater flexibility, while stepping back to normality along with adapting to the effects of the reforms. In the early 1990s, the Indian banks stepped back in such an era with a stronger balance sheet and rising profitability from a heavy overhang of bad debts and large loan delinquency. Not excluded by the bad debt that emerged after the banking sector reforms and the implementation of prudential norms, the banking industry witnessed a solid growth and expansion in the post reform era. The end results are increased equity level, rise in profitability and efficiency improvements, and all these factors leads to developments in enhancing customer service quality. Also there is increasing convergence of banking industry with many other major finance segments, especially the securities markets. The integration with

international markets is also on the increase, where the size and operations of Indian banks are growing (Sharma, 2017).

High level of market competition, people's increased awareness and appreciation of quality, evolving social values, growing focus on good corporate governance etc have significantly influenced the changes in the environment. However, today if there has been a shift in the way in the banking business, both retail or otherwise, is operated across the country and beyond it is primarily due to rapid technological advancement (Goyal, 2012). There has been a substantial improvement in the size, distribution and activities of banks in India over the last three decades. During this period, the number of bank branches grew considerably. Bank's company profile has drastically evolved to include nontraditional practices such as merchant banking, mutual funds, new financial services and products, personal investment counseling etc. The introduction of new banks has stepped up competition to attract and retain clients. Computerization was necessary for both customer service needs and operational efficiency (Srikanth, 2018). Today, banks are racing with each other to offer their customers not only 'Anytime Banking', but 'Anywhere Anytime Banking'. All these innovations were mainly aimed at providing improved and more creative customer service.

CHANGING SCENARIO

The changes awaiting managers are due to the substantial way of banking – which is experiencing a rapid transition in today's world in response to the forces of globalization, functional productivity and efficiency, diminishing profit margins, effective assets and liability management, risk management, anytime & anywhere banking system etc. the biggest challenge facing banks is maintaining the dropping margins due to the impact of competition (Bajaj, 2000). In this context, there is an important need for technology up gradation, and its alignment with the precise way in which banks operate to help them succeed in terms of services given to their stakeholders, better housekeeping, maximizing the use of funds and building up is for decision making, better management of assets and liabilities and the assumed risks which have a direct impact on the balance sheet of banks as a whole. The technology has proven capacity to change methods of selling, promoting, designing, pricing and distributing financial products and services along with cost savings in the form of an automated, self service delivery system for products. Such changes require a new diverse and challenging work culture to meet the demands of customer relations, product differentiation, brand norms, credibility, corporate governance and regulatory requirements (Fernando, 2011). Innovation retains the key to Indian Bank's future success. The transitions and rapidly changing situation focus on the human resources and skills needed to deal with those rapid changes. Indian banks have always proven their versatility to change, and it would be possible for them to be agile and flexible organizations by implementing fine tuned customer relationship strategies, revived recruitment, selection and placement policies based on assets & liabilities and risk management systems. These technical capabilities and human resource enhancement meet the challenges of paradigm shift (Mehrotra, 2006).

CHALLENGES FACED BY INDIAN BANKS

Since reforms to liberalization and globalization in the 1990s, the Indian financial service industry experience substantial changes. In particular, during the time, the banking industry has faced significant changes which have posed a lot of challenges to bankers as never before. The major challenge faced by the Indian Banks is in the form of competition from foreign banks (Mohan' 2003). In 1993, the entry of foreign banks was approved by the Reserve Bank of India. This initiated the entry of several foreign banks. Such radical "new private sector banks"

gradually expanded by creating branches mainly in metro and cities. The use of banking services was also increased by Automated Telling Machines (ATMs), home banking, Internet Baking and tele banking. These banks operating in a highly sophisticated environment with better personal efficiency will able to win many clients and started making profits from the first year of their operations. No wonder their market share is growing because of their location in the area where business is concentrated, followed with quality service, highly professional approach and capability of offer innovative products (Bank net India, 2008).

Banks, particularly those in the public sector, need to break away the use of the Real Time Gross settlement and Electronic Fund Transfer Systems infrastructure that could aid their customers (Jain, 2016). Banks have potential to increase the share of non interest income which will increase profitability and productivity. Although opportunities are available, recognizing them is a challenge that banks can meet with technology, human resource skills and financial expertise being successfully harmonized.

Major challenges have been faced in the following categories:

COMPETITIVE ADVANTAGES OF INDIAN BANKING INDUSTRY

A. TECHNOLOGY

Foreign banks and new private sector banks have adopted technology right from the start of their operations and thus have easily adapted to the technology changes. Whereas public sector banks and old private sector banks (excluding a few) have failed to keep up with these developments (Namita, 2011). Historical, political and other considerations such as work culture and working relationships (which are regulated largely by negotiated agreements between managers and staff members) can be seen as the key constraints in this regard.

Technological improvements in banking are the development of the INFINET (India Financial Network) a comprehensive means of communication not only between branches of banks or across banks, but also with bank's constituents. The Electronic Fund Transfer (EFT) program has allowed easy and safe remittance of funds from one bank branch to an account in another bank branch at another location. RBI has launched an application that would operate on the INFINET communication network to secure and stable transfers of the Structured Financial Messaging System (SFMS). This secure network messaging is also used for a variety of intra-bank applications. A few another items are the Centralized Funds Management System (CFMS), the Centralized Public Debt Office (PDO), the Negotiated Dealing System (NDS) and the Security Settlement System (SSS), the Real Time Gross Settlement System (RTGS).

Internet banking has already become a regular feature offered by banks in India. It is not all about just accessing one's bank account on the net but conducting a complete range of activities online (Witter, 2000). The scope of online solutions offered by banks helps everyone to conduct their business anytime, anywhere without the physical presence of being in the bank at a given time.

From accessing one's account to making bill payments to buying and selling shares online, internet banking saves the customer a lot of time and effort. The RBI's introduction of The National Electronic Clearing Service will be centralized the ECS operation and bring in the uniformity and efficiency to the banking systems. ECS was introduced in the early 1990s and is currently available at more than 80 locations making it easy to pay and receive for frequent and bulk purchases. Each month on an average over 20 million ECS transactions are processed (Divekar, 2000).

- **COMPLETE PACKAGE**

arma, 2010).

Banks are offering a wide range of services online. Some of these are:

1. **Account Information** - Statement, number of transactions, cheques issued, stop payment of cheques, flexi deposits, overdrafts, tax deduction, demit accounts and online trading.
2. **Transfer of Funds** - Transfer of funds between accounts, schedule transfer for a future date, status of funds transfer, unapproved fund transfers.
3. **Bills** - Payment of bills to utility companies and banks, scheduling of payments for a future date, pending payments, history of payments, sending mails for bill payments, donations, e- ticketing and payment gateways.
4. **Request**- issue of cheque books, demand draft, fixed deposit account opening, renewal, break of FDs, opening of additional accounts, changing of personal details like address, phone numbers, history of requests.
5. **E-mails** - communication with the bank staff and storing, receiving and accessing mails.
6. **Trade** - Import and export, Letter of Credits (LC), amendments of LCs, foreign bills, bank guarantees, forward contracts and money transfer.
7. **Limits** – The Bank has approved various limits to it.
8. **Currency** - currency transactions.
9. **Uploads** - bulk upload of debits and credit transactions, salary disbursements, dealer credits and dealer debits.
10. **Activities** - financial and non financial queries (Sharma, 2010).

Banking success is completely reliant on the ability to analyze Information Technology. The reason is obvious: information is the raw material, the commodity and as one of the key elements of a bank's distribution operation.

B. MERGERS, ACQUISITIONS AND CONSOLIDATIONS

Mergers are the latest financial scene in the banking industry. A successful merger will be a trendsetter, not only for the SBI groups, but for other public sector banks as well. The other six associates of SBI -- State Bank of Mysore, State Bank of Patiala, State Bank of Bikaner And Jaipur, State Bank of Hyderabad, State Bank of Indore and State Bank of Travancore -- can then be amalgamated with SBI and close integration of banking procedures; there is significance difference within the group. Besides, there is significant difference in staffing patterns. Integrating the human resource structure is a thankless task post merger (Lakkoju, 2014). The expectation is that after the consolidation, four or five large banks will remain on the scene, ready to take on international competition.

Centurion Bank of Punjab's merger with HDFC Bank belongs to the latest – most variants have occurred at the Government's case. The State previously owned the Oriental Bank of Commerce to take over the failed Global Trust Bank and the Nedungadi Bank, Punjab National Bank.

Trade union opposition to mergers among PSBs is valid even if it has been on predictable lines: that a closure of redundant bank branches may lead to fewer jobs in the long run. Also, despite the Governments assurance of job security, immediately after the merger, a combined entity will still find it difficult to utilize the enhanced manpower. Second, though size is important, even a merger of two or three large and medium sized banks cannot create an entity big enough to face the global giants (Mathur. 2002). More recent developments in the U.S. and other developed countries prove the point that large size of a financial institution does not automatically vouch for sound management. The world's biggest banks are reeling under the impact of the serious crisis in the financial sector, largely their own creation.

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In terms of the challenges posed by the potential market opening to global competition, these banks must evolve naturally and via acquisitions – to a size and productivity, which will allow themselves to take over other major global banks. Organic growth of these banks will resume as allowed by regular authorities, through regional expansion. Nevertheless, most will aim to expand inorganically, through nation-specific acquisitions to quickly acquire local presence through an exciting collection of customers, a responsibly sized business, and most importantly, local knowledge and capabilities (Morgan, 2019). Restructuring would also improve the risk level of financial sector and the Indian Economy, by significantly lowering the risks of poor financial crisis and strengthened corporate governance.

Such large banks would be ideally suited to take on greater risks and will be able to ensure better returns for shareholders, due to revitalization of their models of human resource management and effective management of merger-linked crises.

Ideally, the combination of consolidation and the entry of more private and foreign banks would lead to far greater penetration of financial services in India with banks taking competitive positions by products, sector or customer segments (Raveendran, 2014)

C. LARGE NETWORK, NO HELP

Two other points are relevant to a debate on mergers leading to consolidation in this sector. One, in the reform era, a large network of branches need not necessarily be considered strength. Other delivery channels such as internet and phone banking are becoming important. In technology related areas, a merger by itself will not contribute much. Bringing together PSBs is bound to lead to redundancy of bank offices, especially in the metros. Second, the official fascination with mergers is based on the belief that the future of the banking lies in universal banking. The assumption is that, many more financial services besides the basic ones can be undertaken by a large entity after merger. The fallacy in this argument is this. While some three years ago banks in India were fascinated with the universal banking model and wanted to offer several non- traditional products as well, today, there is much less enthusiasm. Some of the risks involved in the 'newer products such as credit cards are becoming all too apparent for the PSBs. Stock market operations are another vulnerable area (Kamesam, 2001).

As the restructuring cycle proceeded in 2007-o8, the number of SCBs declined from 82 at the end of March 2007 to 79 at the end of March 2008 due to the merger of two old banks in the private sector and the amalgamation of a foreign bank. The Sengli Bank Ltd. Was amalgamated with ICICI Bank Ltd. under section 44A of the Banking Regulation Act, 1949 effective from April 19, 2007. Under the same section, on August 27, 2007; the Reserve Bank of India approved Lord Krishna Bank's amalgamation scheme with Centurion Bank of Punjab Ltd. the scheme came into force with effect from the commencement of business on August 29, 2007.

Subsequently, Centurion Bank of Punjab Ltd's Amalgamation scheme; the Reserve Bank of India approved on May 20, 2008 was approved with HDFC Bank Ltd; the scheme entered into force with effect from the commencement of operations on May 23, 2008.

The following changes have been made to the commercial banking sector during the financial year 2008-09:
  i.   Centurion Bank of Punjab Ltd merged with HDFC Bank Limited with effect from May 23, 2008
  ii. The State Bank of Sourashtra merged with State Bank of India with effect from August 13, 2008.

The following changes occurred to the commercial banking sector during the year 2007-08:

i.   Sangli Bank was merged with ICICI Bank with effect from April 19, 2007.
ii.   Lord Krishna Bank was merged with the Centurion Bank of Punjab with effect from August 29, 2007
iii. American Express Bank was merged with Standard Chartered Bank with effect from March 5, 2008 (Panigrahi, 2010).

D. TRANSFORMATION

The challenges in terms of transformation are on three-four different planes. The first is induction of technology; the second is growing new business lines, third is the challenges of getting the right skill - sets to do business, and fourth is go along global competition. There are no legacy structures at Indian banks. Their transition from existing systems to unified core banking systems was relatively smoother as a result[24]. Almost all of India's banks have either opted for the core banking system or are selecting a core banking system in the process. The net result is that the standard transaction processing systems will soon be in operation for the whole. Some banks are still a bank in transformation. Any acquisition must increase market share, or add geographical coverage or reduce cost and add to scale.

E. CUSTOMER SERVICES

In today's the competitive environment, first we need to identify the customer segment that one would like to cater to and then design products specific that target segment. This would further require personalization going right up to the individual level. Public sector banks in India are not very much on an aggressive spree to acquire customers. They have customers automatically coming to them on a regular basis and at a consistent rate even if the rate of acquiring the customers is lower than the rate of attrition. Today, the customer base of a PSB as compared to a Private Sector Bank or a Foreign Bank is much different in the spectrum or variety of customers. PSBs by the virtue of low minimum account balance; low service charges, etc. Still managed to attract the lower strata of society to open accounts and to do transactions where as the private and foreign banks enjoys servicing the middle and upper strata of the society. So for a public sector bank the issue of customer acquisition is not of prime importance; even for the next 8 to 10 years customers will keep coming in at decent rate, taking onto consideration the PSBs are also moving into full computerization and Core Banking Solutions. The bank should not only offer new products and services to the customer but also has to serve him with satisfactory service so that he becomes willing to stay a customer of the bank. Banks and financial institutions are organizations which provide services. They serve a very large number of customers spread across the country. Such institutions provide service through a network of branches and provide personalized service to the needs of their clients in different areas (Vishwas, 2008).

F. HUMAN RESOURCES

HRM is set to take on the same value as bank's balance sheet management. The time will come when the technical strength of all banks will be more or less equal, and the difference will be with the quality of human resources. Human resources constitute a dynamic element in bank's non financial assets. Personnel Management in banks however, has become stagnant in the past. Managements tend to look to human resource as liability rather than assets. There were many reasons for that including the attitude of certain unions. What is

important now is the question of what Indian banks are going to do in future with regard to recruitment and advancement policies. For that banks should be selective in getting the type of talents they need. Staff orientation particularly at the branch level is a key component for success and in this regard, neither the older private banks nor the nationalized banks have been successful (Huselid, 1995). Banking is a service oriented business, that requires a high level of professional and personal expertise, and national boundaries are no longer very important for capital mobilization and allocation. There is no excuse, under the new circumstances Why India should not emerge as a major international banking hub, just as it has emerged as an important function in the field of information technology and software.

With the economy growing and business going global, to remain competitive, India's best banks would need not just world-class size, but new skills and operational efficiencies. Banking experts say banks need robust management in the market where talent is difficult to hold on. Another big challenge facing public sector banks is attracting and retaining talent, as their pay rates are well below those of private sector and foreign bank peers. Some banks are still a bank in transformation. Any acquisition must increase market share, or add geographical coverage or reduce cost and add to scale (Kilam, 2007).

G. HRD

The key to organization performance would be our ability to use and build knowledge about our market through superior analysis and consequent insight into consumer and competition behavior. The HRD teams would have to help top management teams create an environment where the staff is encouraged to make different business decisions based on their insights and they see risk as an opportunity for creating value for the customer as well as the share holder. Learning and Development effort would have to become more experiential in nature.

Improve the HR portfolio through the Recruitment of qualified fresh hands and training them in specialized areas to meet the needs of future, technology has had enormous impact in the banking sector. Anywhere banking and anytime banking has become a reality attracting and retaining talented employees, increasing the performance levels of the staff in the long run. HRM's most demanding goal across the finance service sector is to attract the right people. An organization's sustainability and performance depends critically on the efficiency and also human resource management. The financial services sector needs to focus on recruiting young talents and retaining them. Another major achievement of the bank has been to retain key talent within the organization and creating several leaders within the bank (Vijila, 2007).

- **LEADERSHIP IN BANKING**

Consequently in 2017, banks themselves will need to develop and grow leadership within their organizations, if they want to have outstanding 2020 leaders. Leaders of productive banks would not only need to imagine the future, but would need to build the future accordingly in every moment, having visualized it. It will be crucial for leaders to focus on creating value by continuously improving their own level of competence as well as those he/she leads. At an administrative level, optimizing, distributing the network and establishing strategic alliances with others would be necessary for banks. They will need to be different and faster.

As far as India has concentrated, attrition is a serious phenomenon, particularly where people are the most important assets in today's knowledge driven market place. While companies deal with attrition by designing persuasive retention strategies, identifying attrition

early in the recruitment process is crucial for organizations to minimize time, expense and effort losses. The company should provide opportunities for career growth, along with rewards and recognition (Yattoo, 2000). Open communication and fair treatment are the most important aspect. This, along with an open culture would boost staff retention. The last, but not the least is the company's brand image. This definitely will stop an employee moving out.

- **TRAINING IN BANKING**

Banks adopt and adapt to innovative tools to further their business. The new technology is transforming the banking the banking skills structure. Such new and improved abilities will require new awareness and changes in behaviour regarding existing human capital. How should the bank HR Manager react to this rapidly changing scenario? The training system will emerge as a significant instrument of intervention in this context. The banking sector training system has a clear structural foundation. The training practices, however, have been more ritualistic in the past due to the absence of strategic connection between training and the development of human capital (Garg, 2013).

Now a day, it is crucial to make the training role an efficient organizational intervention by setting out a consistent training and development policy within the context of the creation of total human capital. Training institutions need to be actively involved in the overall training cycle starting with the identification of training needs, assessment of the effectiveness of training and the advantages of training by internal and external customers for end users. Canara Bank also received the Employer Branding Awards 2007 in recognition of varied programs and excellence in staff training and became the first Indian public sector bank to win this international award.

- **STAFF SPECIALISATION**

Staff specialization in vital areas is key to future business. India is a repository of talents. We know that there is global recognition and global demand for India talent. First banks should recruit specialized talents in specific areas from the vast pool of talents. But the specialist staffs in the market have their price tag with them. When you really need them you have to pay the price. No one in the present market condition will be wedded to an organization as we saw in the past. Banking in India, is going to acquire a large number of specialists, experts and consultants in many emerging new areas. Generalist staff can no longer stay away from specialized areas because the whole lot of banking is going to be influenced by specialized functions.

At this stage, there are banks who have grown without sufficient investment in back-end process or training their staff, but that is not going to be sustainable advantage, as it is the customer confidence that would determine long term customer decisions. The banks that are dependent on outsource staff for customer front-ending process would need to be proactive in training the outsourced staff so that any problem arising out of their action does not hurt the bank image or business (Patil, 2017).

Indian banks must rapidly expand overseas. With globalization and increased awareness of international banking markets, banks will see business opportunities in various markets. As both the manufacturing and service sectors continue to enter foreign markets, too. We will need to develop new sets of skills – both soft and hard. Sets of hard skills such as market knowledge, local rules and regulations, and industry profiles and soft skills such as a good understanding of cultural aspects, creation of HR policies addressing labour diversity issues (Garg, 2013).

Faced with human, technical and financial resource challenges, an Indian bank's progress will be determined by this bank's ability to adapt to the pace of change and their ability to make the right decisions. Success will depend on selecting the right business model effectively with

the correct assessment of bank's skill and resources, planning the operations to fit the model chosen. Though, the opportunities might be numerous, it would be a great challenge to respond favorably to them and consider them to the extent desired. With the right strategies in utilizing technology and creating market segments for human resources, designing new generation products and services, concentrating on efficient customer service and pursuing global ambitions will take Indian banks to next generation banking.

Each bank have to see where do they stand: They should see whether proper progress in a place, proper technology in a place, proper product in a place, when a particular segment of business provides greater profit opportunities, greater resource should be allocated for it. Every new product and every new process need the support of technology. Bringing in technology requires a proper understanding of the technological tools and its implementation. This gain needs a competent managerial capability to ensure proper use of technology so that it effects qualitative improvements in the internal system.

In an era of liberalization, globalization and privatization, quality has become of at most importance in Indian organizations as they strive for a competitive edge in the market. One of the most important defining parameters will be met for the competitive banks. This will be their ability to reach different markets and customers. Banks will need to explore new markets, across India's borders and deep inside India's village's, in terms of geographical expansion (Tondon, 2006). Banks need to take a comprehensive view of mapping and enhancing the basic processes by which they are running their business including how efficient they are using their human resources. Technology is a facilitator, but bank needs to continuously build and refine its own strategy.

High financial growth provides a range of prospects for banks in new business and in expanding existing ones as well. Growing Indian business international operations will provide the global banking opportunities for Indian banks. Increasing people's income rates would allow for the design and developments of a wide range of personal financial products and fee-based services. Focus on infrastructure development and certain key sectors such as rural economy, health and education provide existing business opportunities for the vast branch network of public sector banks located in rural and semi-urban areas.

Banks in India are facing increasing competition, both in terms of their productive markets as well as in terms of fund resources. Moreover, it has become important for banks to actively reengineer, offer products and services to meet ever changing requirements and upgrade the workforce's knowledge in order to have a professional approach (Rajan, 2011).

CONCLUSION

Indian banking industry is walking through an established phase of development. The real economy flow, which has developed at more than 8% in the pst three years, has provided the sector with significant growth opportunities. Global borrowing is rising at a higher rate than depositing. The rising gross income of the population has provided the banks with ample opportunities for innovations in product development and distribution. In addition, the expansion of international collaboration to enable the Indian banks to pursue new business opportunities has resulted in Indian Banking industry's reach and significance. The rising in foreign liabilities has driven banks to increase their focus on external operations by opening new branches outside India and developing business relationships and partnerships.

The banking sector exemplifies the cutting edge of rapid change. In order to drive these radical changes and to handle the potential risk, India needs an even stronger banking system. Larger banks that can take on greater risk become internationally active, raise and manage capital from all over the world, and being extremely efficient in servicing all parts of the population through a low cost model. Given the threat posed by the potential market opening to global competition, these banks must grow organically and through acquisitions – to a size and efficiency that will enable them to take over other major global banks. Organic growth for these banks will be continuing as allowed by the regular authorities, by regional expansion. Nevertheless, most will aim to expand inorganically, through country specific acquisitions, to quickly gain local presence through an established set of customers, a reasonably sized company, and above all local knowledge and capabilities.

Banks needs to strategize and re-strategize on "Internet Time" to broaden their organizations. The benefits must rest with the larger banks. Experience in the West and India indicates that fleet-footed organizations can effectively dominate larger institutions with the ability to exploit the strength of rival institutions, far larger then themselves. Banks must also go beyond non – paradigms and protect their position on the international stage.

REFERENCES
1. Akrani, Gaurav, (2010), *"Narasimham Committee Report 1991-1998 - Recommendations",* Kalyan City Life Blog.
2. Bajaj .K.K, (2000), "*E-Commerce related issues in the Emerging Hi-Tech Banking Environment*", The Journal of the Indian Institute of Bankers, January-March.
3. Bank net India, (2006), *"ATM User Survey 2006"*, SBI Staff Training Centre, Hyderabad, September.
4. Dean, Witter, (2000), *"Research paper on Internet Banking"*, Chayanika, Gurukul, Gurgoan.
5. Divekar, D.A., (2005), *"Programme On Role Of Information Technology In NDS, RTGS & Electronic Payment Systems"*, VAMNICOM, Pune, PP 85. & 89.
6. Fernando,A.C, (2011), "*Business Environment*", ISBN 978-81-317-3158-1, Pearson, Delhi, PP 550.
7. Garg, Richa, (2013), *"Role Of Foreign Direct Investment In Indian Banking Sector"*, International Journal of Research in Finance & Marketing, Volume 3, Issue 2, ISSN 2231-5985.
8. Goyal,Krishna.A, Joshi,Vijay, (2012), "*Indian Banking Industry: Challenges And Opportunities*", International Journal of Business Research & Management (IJBRM), Volume 3, Issue 1, PP 18-22.
9. Huselid, (1995), *"Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance"*, Academy of Management Journal, volume 38, Issue 3, PP 635– 672.
10. Jain, N.P., (2010), *"Chapter 3- An Overview Of Indian Banking Sector"*, shodhganga.
11. Jain, Sankalp, (2016), *"Electronic Fund Transfers: A Critical Study in Indian Context with Special Reference to Security & Privacy Issues"*, Social Science Research Network Journal, NewDelhi.

12. Kaur, Daljeet, (2010), *"Quality Of Work Life In ICICI Bank Ltd, Chandigarh"*, International Research Journal, ISSN- 0975-3486, Vol I, Issue 11.

13. Kamesam, (2001), *"IT Challenges to Banks"*, RBI Bulletin, PP 1225.

14. Kilam, I.K.; (2007); *"HRD in Public Sector Banks – A study (Part II)"*; PNB Monthly Review, vol. 29, Issue No.05, PP 14-24.

15. Lakkoju, Srinivas, (2014), *"An Empirical Analysis of Managerial and non-managerial HRD climate perceptions in SBI and KVB through internal and extyernalcomparision: A case study conducted in Andhra Pradesh"*, Indian Journal of Industrial Relations, Vol 41, Issues 1, PP 51-72.

16. Mathur KB, (2002), *"Public Sector Banks in India – should they be privatized"*, EPW, Vol. XXXVII,, Volume No.23, PP 2246-49.

17. Mehrotra, Shyam, Kaveri, (2006), New Dimensions of Bank Management, Skylark publications, New Delhi.

18. Mohan, Rakesh, (2003), "Transforming Indian banking in search of better tomorrow", IBA Bulletin Special Issue, March 2003-04, PP 24-28.

19. Morgan J.P; (2019), *"Top Considerations for International Expansion"*, commercial-banking-legal-disclaimer, Global Business.

20. Panigrahi, Ashok, (2010), *"Capital Structure of Indian Corporate: Changing Trends "*, Asian Journal Of Management Research .

21. Patil, B.S., Swapna.H.R; (2017), *"Human Resource Development Practices and Employee Productivity in Banking Sector"*, Journal of Human Resource Management, vol.21, Issue 11.

22. *Quarterly statistics on Deposits and Credit of Scheduled Commercial Banks*, (2018), Reserve Bank of India, Mumbai.

23. Rajan et al, (2011), *"Efficiency and Productivity Growth in Indian Banking"*, Centre for Development Economics Department of Economics, Delhi School of Economics, Working Paper No. 199.

24. Rajput, Namita, Gupta, Monika, (2011), *"Assessing the efficiency of foreign banks in Indian context"*, Banks and Bank Systems, Volume 6, Issue 2, pp- 99-106.

25. Raveendran, M., (2014), *"Innovative Banking"*, IBA Bulletin, PP15.

26. Shah, Santosh; Tyagi, Akansha, (2017), *"HR Challenges and Opportunities in Banking Sector"*, International Journal of Engineering Technology Science and Research (IJETSR), ISSN 2394 – 3386, Volume 4, Issue 7, PP 928-932.

27. Sharma et al; (2013), *"Role of FDI in Banking in generating wealth to Indian Economy"*, International Journal of Advancements in Research & Technology, Volume 2, Issue 5, May-2013 , ISSN 2278-7763.

28. Sharma, Aditya, Thomas, Renny, (2017), *"Mastering the new realities of India's Banking Sector"*, McKinsey Insights.

29. Srikanth.N, (2018), "*Internet Banking Adopted By Indian Banks: Current Scenario & Strategy*", Airo International Research Journal, Volume XV, ISSN: 2320-3714.

30. Thomas, Renny, Sharma, Aditya, (2017), *"Mastering the new realities of India's Banking Sector"*, McKinsey Insights**.**

31. Tondon, R., (2006), *"Globalization: Impact on Indian Banking"*, Chartered Financial Analyst, PP 91-92.

32. Vijila, Kennedy, (2007), *"Do HRD Practices Differ Among the Categories of Indian Commercial Banks?"*, ICFAI Journal of Management Research, Vol. 6, Issue 12, PP 33-42.

33. Vishwas N, Wadekar, (2008), *"Customer Expectations from Banks - A paradigm shift"*, The Indian Banker, Journal Vol. Ill, No.4, PP 46 & 47.

34. Yattoo N.A, (2000), *"Executive Development in Banking Industry"*, Sarup & Sons, New Delhi, PP 1-4.

Role Of Special Economic Zones In Attracting FDI

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ABSTRACT
This paper examines the role of SEZ in attracting FDI into India..The introduction of Special Economic Zones (SEZs) in India has injected hope for augmented economic growth in recent future. A special economic zone (SEZ) is an area in which the business and trade laws are different from the rest of the country. SEZs are located within a country's national borders, and their aims include increased trade balance, employment, increased investment, job creation and effective administration. To encourage businesses to set up in the zone, financial policies are introduced. SEZs were introduced to India in 2000, following the already successful SEZ model used in China. The objective of the SEZ Act was to create a hassle-free regime and the rules would be formulated keeping this in mind. The ministry is also holding talks with state governments as they have to play an important role in the development of SEZs.The government has provided various incentives in the form of single window clearance mechanism to reduce the bureaucratic delays, tax concessions, providing land at cheaper rates, duty free import of materials, 100% FDI via automatic route except for some items, exemption from Minimum Alternate Tax, the benefit of external commercial borrowings up to a certain limit etc.With operational success, the role of the special economic zones has expanded from trade to investment technology, Research and Development, service, and training. Free zones have become the center of activity in modern economy. SEZs have played a significant role in economic enrichment of developing countries, by improving international business. The main objective of the paper is to investigate whether the enactment of SEZ policies had any impact on inflow of FDI among Indian states.

KEYWORDS: Special Economic Zone, Special Economic Policy, Foreign Direct Investment

INTRODUCTION
India was one of the first in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla in 1965. With a view to overcome the shortcomings experienced on account of the multiplicity of controls and clearances; absence of world-class infrastructure, and an unstable fiscal regime and with a view to attract larger foreign investments in India, the Special Economic Zones (SEZs) Policy was announced in April 2000. This policy intended to make SEZs an engine for economic growth supported by quality infrastructure complemented by an attractive fiscal package, both at the Centre and the State level, with the minimum possible regulations. SEZs in India functioned from 1.11.2000 to 09.02.2006 under the provisions of the Foreign Trade Policy and fiscal incentives were made effective through the provisions of relevant statutes. To instill confidence in investors and signal the Government's commitment to a stable SEZ policy regime and with a view to impart stability to the SEZ regime thereby generating greater economic activity and employment through the establishment of SEZs, a comprehensive draft SEZ Bill prepared after extensive discussions with the stakeholders. A number of meetings were held in various parts of

the country both by the Minister for Commerce and Industry as well as senior officials for this purpose. The Special Economic Zones Act, 2005, was passed by Parliament in May, 2005 which received Presidential assent on the 23rd of June, 2005. The draft SEZ Rules were widely discussed and put on the website of the Department of Commerce offering suggestions/comments. Around 800 suggestions were received on the draft rules. After extensive consultations, the SEZ Act, 2005, supported by SEZ Rules, came into effect on 10th February, 2006, providing for drastic simplification of procedures and for single window clearance on matters relating to central as well as state governments. The main objectives of the SEZ Act are:

- Generation of additional economic activity
- Promotion of exports of goods and services
- Promotion of investment from domestic and foreign sources
- Creation of employment opportunities
- Development of infrastructure facilities

The SEZ Act 2005 envisages key role for the State Governments in Export Promotion and creation of related infrastructure. A Single Window SEZ approval mechanism has been provided through a 19 member inter-ministerial SEZ Board of Approval (BoA). The applications duly recommended by the respective State Governments/UT Administration are considered by this BoA periodically. All decisions of the Board of approvals are with consensus. The SEZ Rules provide for different minimum land requirement for different class of SEZs. Every SEZ is divided into a processing area where alone the SEZ units would come up and the non-processing area where the supporting infrastructure is to be created.

OBJECTIVES OF THE STUDY

The paper aims to study the history, role of Special Economic Zones in India and how it attracts Foreign Direct Investment.

REVIEW OF LITERATURE

Subrahmanian and Mohanan (1978) analyzed the central idea behind the setting up of EPZs in underdeveloped countries to motivate Multinational Corporations (MNCs). In their paper the authors studied the Santa Cruz Electronics Export Processing Zone (SEEPZ) and brought out that operations of the MNCs have not achieved the expected results. First, the overall production and export, as well as the proportion of value added, by units in the SEEPZ have been far below the targets. Second, the proportion of the value added has varied inversely with the degree of foreign control, with Indian owned units using Indian technology performing far better than units controlled by the MNCs.

Bhatta (2003) highlighted the importance of SEZs, provided an overview of the rules, regulations and incentives, the possible implications for the environment of the region, and the importance of ensuring transparency in conducting an environmental impact analysis. The study

emphasized that maintenance of ecological balance along with industrial development is required.

Aggarwal (2005), in his research paper revealed that the SEZ scheme introduced by the Government of India in April 2000 has its genesis in the EPZ scheme which was introduced way back in 1965 when the first zone was set up in Kandla. The SEZ Act is a major step in the direction of providing a long-term comprehensive policy framework and fiscal incentives are very important in determining the attractiveness of the zones. The Act has reinforced the authority of the central government. She further stated that the problem of co-ordination between the centre, states and zones will remain and may perhaps aggravate with the creation of different authorities looking after approval and management.

RESEARCH METHODOLOGY
The present study is descriptive in nature. For the collections of required information, secondary method of data collection are used. Data The secondary data has been collected from the available literature from Text books, Journals, Magazines, Newspapers, Annual reports and from various websites.

FACILITIES AND INCENTIVES OFFERED TO THE SEZ'S
The incentives and facilities offered to the units in SEZs for attracting investments into the SEZs, including foreign investment include:-

  ➢ Duty free import/domestic procurement of goods for development, operation and maintenance of SEZ units
  ➢ 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years. (**Sunset Clause for Units will become effective from 01.04.2020**)
  ➢ Exemption from Minimum Alternate Tax (MAT) under section 115JB of the Income Tax Act. *(withdrawn w.e.f. 1.4.2012)*
  ➢ Exemption from Central Sales Tax, Exemption from Service Tax and Exemption from State sales tax. These have now subsumed into GST and supplies to SEZs are zero rated under IGST Act, 2017.
  ➢ Other levies as imposed by the respective State Governments.
  ➢ Single window clearance for Central and State level approvals.

The major incentives and facilities available to SEZ developers include:-

  ➢ Exemption from customs/excise duties for development of SEZs for authorized operationsapproved by the BOA.
  ➢ Income Tax exemption on income derived from the business of development of the SEZ in a blockof 10 years in 15 years under Section 80-IAB of the Income Tax Act. (**Sunset Clause for Developershas become effective from 01.04.2017**)
  ➢ Exemption from Minimum Alternate Tax (MAT) under Section 115 JB of the Income Tax Act.*(withdrawn w.e.f. 1.4.2012)*

➢ Exemption from Dividend Distribution Tax (DDT) under Section 115O of the Income Tax Act.*(withdrawn w.e.f. 1.6.2011)*
➢ Exemption from Central Sales Tax (CST).
➢ Exemption from Service Tax (Section 7, 26 and Second Schedule of the SEZ Act).

Investment attraction tools in SEZ laws

Almost 80 per cent of the SEZ laws provide for fiscal incentives, such as tax holidays for a defined period (often 5 to 10 years) or the application of a reduced tax rate. Tax exemptions may apply to the payment of profit taxes, corporate taxes, wages and salaries taxes, and value added taxes invoiced by local suppliers of goods, services and works necessary for carrying out SEZ activities (e.g. Kenya, Special Economic Zones Act and Export Processing Zones Act). Some countries allow the deduction of a certain percentage of training expenses for local personnel from the tax bill. Others link the granting of fiscal incentives to specific investor performance, for example, reliance on the use of local content or local employees, or compliance with certain export targets (e.g. Mali, Code des Investissements) or training of personnel (e,g. Mexico, Ley Federal de ZonasEconómicasEspeciales). Similarly, most SEZ laws provide for a special customs regime, eliminating or reducing tariffs on goods, plants or machinery imported into the zone. This applies to items to be used exclusively inside the zone (e.g. Azerbaijan, Law on Special Economic Zones). In addition, there may be expedited and simplified customs procedures. In most SEZs, customs officers are present to conduct on-site checks. Approximately one third of the SEZ laws include rules on investment facilitation. One frequently used tool is the streamlining of registration procedures, for instance by providing a list of documents required for admission or by setting deadlines for the completion of approval procedures. Other laws require zone operators to establish a single point of contact or a one-stop shop to deliver government services to businesses within SEZs (e.g. the Philippines, Special Economic Zone Act). Other laws provide for the creation of business incubators in zones to assist enterprises in their initial periods of operation by offering technical services and to ensure the availability of physical work space (e.g. Kosovo, Law on Economic Zones). Some laws also eliminate restrictions on recruitment and employment of foreign personnel within the zones (e.g. Nigeria, Export Processing Zones Act).

SEZs and Sustainable Development

The aim of sustainable development is to make sure that growth of economy takes place without causing any adverse impact on the environment. SEZ policy can help an economy to achieve the growth objective in short run but in long run even the units in SEZs will be profitable if they grow keeping in mind the adverse impact of its effluents on the environment. Since nowadays government is focusing on reducing its deficit by increasing the quantum of exports and wants to increase the standard of living of people by generating employment opportunities, it is providing incentives and facilities to companies who set up their operations in SEZs. The policy makers need to keep in mind the long term impact of such development and hence frame the policies accordingly. The Centre and State governments also aims to develop the rural areas by providing adequate infrastructure to these areas and then setting up SEZs there. With this the standard of

living of such rural area improves as there are now employment opportunities available for the local people to get into. The government should also encourage development of Micro, Small and Medium Enterprises in Special Economic Zones as a testing ground which if successful can be transformed into a large business.

CONCLUSION

The present study aimed to understand whether establishment of Special Economic Zones (SEZs) have succeeded in attracting more FDI in state.The states which attracted more FDI—Maharashtra, Karnataka, Gujarat, TN and AP are all coastal states. However, the North Eastern states, Bihar and Jharkhand have a minimum number of SEZs and also very low FDI. It is also seen that the operational SEZs are mainly concentrated in those states with higher FDI, and thus may further exacerbate regional inequality.   In the present study, there was no distinction between whether SEZ is electronics orfood processing or biotechnology or textile or mixed, it is possible that moremixed SEZ may attract more FDI.

References:
- ➢ www.unctad.org
- ➢ www.sezindia.nic.in

Influence of Leadership Style on Employee Motivation in Yemen's Audio Media

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Abstract
Media workers in Yemen have been facing serious challenges that have ensued from the tumultuous political situation over the last five years. The status of press freedom has worsened and violations against reporters have soared. The anti-press environment has posed formidable hurdles before Yemeni media managers since the armed conflict flared up in 2015. Therefore, it has been a herculean mission for media managers to motivate employees to perform their tasks and cope with the unfavourable media climate the country has been witnessing.

The transformational leadership and transactional leadership are among the widely adopted leadership styles in organizational settings. Previous studies have espoused the concept that organizational leadership does have a considerable effect on the way employees behave and perform their jobs.

This study explores leadership practices, particularly transformational leadership and transactional leadership, and their linkage to employee motivation in Yemen's audio media. The study has utilized a questionnaire to measure two variables, leadership and employee motivation, in order to examine the influence of the former on the latter. The study has uncovered the impact of leadership style on the level of employee motivation in Yemen's audio media.
Keywords: *Audio media, leadership, transformational & transactional leadership, motivation*

Introduction
Running a media organization entails an inspiring leader who can motivate the employees to confront challenges and get the work done. Leadership and employee motivation are interdependent in all organizations including the media. Effective leadership is instrumental in creating particular organizational performance HellriegletB. (2004).
The task of employees in media organizations is a creative one. They write reports, news stories, broadcast the news and conduct interviews. This kind of job requires a proper management style to help unleash the creativity of employees and hone their skills.
Different managers adopt different leadership styles. Among the existing leadership styles are transformational leadership and transactional leadership. The former motivates the employees with encouragement and inspiration and the latter uses rewards to motivate the staff.
Bass & Avolio (1999) established a correlation between transformational leadership style and motivation. Moreover, Storseth (2004) found that the people-oriented leadership style was a key predictor of work motivation. Multiple other studies have also confirmed the leadership-motivation linkage.
Leadership behavior is friendly, open and approachable, and the leader forms a sense of togetherness and treats subordinates as equals (Blanchard, 2009). This kind of leadership style

consolidates the highest possible involvement of all the employees in achieving the company's goals, leading to the rapid growth of production, employment and standard of life.

Motivated and satisfied individuals can ensure the survival and growth of a company in a dynamic and highly uncertain environment because of the strong influence leadership has on employees' performance and their involvement in achieving the company's goals Hellriegel et al., (1992).

Leaders identify goals and lead their subordinates to attain them Chaleff, (1995), and it is crucial how dedicated to these goals the followers are (Kelley, 1992). The survival of an organization lies in its ability to preserve its effectiveness and in its preparedness to accomplish its mission and goals which are being achieved with the support of effective leadership Northouse (2007).

Media organizations, especially in countries where media freedom is fragile, need good leaders to lift the spirit of employees and push them to cope with several challenges while on duty. Yemen is an example of a country where the media is struggling to report and inform the public. Since 2015, the media sector has been undergoing a miserable working climate that has forced many media organizations to shut down. The reporters are unsafe to operate freely, and this has pushed many to abandon their profession in the media field.

Keeping a motivated team in such an environment is a difficult task for Yemen's media organizations whichcontinue to face mounting challenges. The clampdown on freedom of speech, the unfriendly environment and the shortage of income are instances of the problems facing media organizations in Yemen. Out of 180 countries, Yemen in 2019 ranked 168th in the World Press Freedom Index of Reporters Without Borders (RSF). Over the last five years, RSF has documented 20 cases of kidnapping of journalists in Yemen.

In view of these circumstances, the leadership style plays a pivotal role in motivating the employees to persist in their job activities and deal with the unpleasant conditions in this field. Audio media outlets still maintain their role in informing and entertaining the audience in Yemen. This study aims at examining the influence of leadership style on employee motivation in the audio media of Yemen.

Review of Literature

Leadership has various styles and definitions. Two of the noted leadership styles are transformational and transactional. Transformational leadership can be defined as the process of influencing major changes in the attitudes, beliefs, and values of followers to a point where the goals of an organization and the vision of the leader are internalized and followers achieve performances beyond expectations Bass, 1985; Yukl, (1999a; 1999b).

Transformational leadership is a leadership process that changes and transforms individuals Northouse (2001).It is a kind of leadership that propels the desire for change, improvement and loyalty to the leader. This leadership style is dependent on assessing the motives of subordinates, meeting their needs and valuing them Northouse (2001).

Transformational leadership, if implemented, pays off Northouse (2001). According to Bass (1998), transformational leaders achieve superior results with one or more of the four components of transformational leadership below.

1) Idealized influence: The leader behaves in a fashion that makes him/her appear as a role model for the followers. Accordingly, the leader becomes admired, respected, and trusted by the followers who are willing to follow this kind of leadership. The followers realize the remarkable capabilities, persistence, and determination of the leader.

2) Inspirational motivation. The leader makes the followers feel the meaning of their work and creates challenges that motivate and inspires the followers' work. This results in better team spirit, enthusiasm, and optimism among the followers. The leader involves them in a positive vision of the future and communicates high expectations that followers want to achieve.

3) Intellectual stimulation: The leader intends to promote the followers' innovation and creativity through questioning established assumptions, reframing existing problems and dealing with old problems in new approaches. The leader encourages creativity and avoids the use of public criticism to respond to individual followers' mistakes. The leader looks for new ideas and creative solutions to problems.

4) Individualized consideration: The leader works to create new learning opportunities in a supportive climate, demonstrates acceptance for individual differences, provides encouragement to some followers, standards patterns of work to others, and allows autonomy for those with more experience. The leader acts as a coach or mentor and attends to the followers' need for achievement and growth.

Transactional Leadership

Transactional leadership is different from the transformational style. Bass (1998) came up with four components of transformational leadership, and two dimensions of transactional leadership. Transactional leadership is based on the following components:

1) Contingent reward: The leader specifies what needs to be done, reaches an agreement with the workers and establishes rewards in exchange for the satisfactory efforts of followers in accomplishing the assignments.

2) Management-by-exception: This behavior represents an active or passive corrective transaction between the leader and his or her followers. In the active case, the leader monitors deviation from standards, mistakes, and errors in followers' performance and takes corrective actions when necessary. In the passive case, the leader waits for deviation from standards, mistakes, and errors to occur and only then takes corrective action.

It is evident that transactional leadership is a matter of exchanges between leaders and followers designed to provide benefits to both.

Employee Motivation

Motivation is vital to employee performance. In the absence of motivation, the employees do not find joy in their job and their desire to achieve would be low. There is a strong connection between leadership style and the level of the employee motivation because leadership competencies include the ability to motivate employees as one of the fundamental duties Lussier (2013).

Motivation is also the process that explains the passion of individuals, direction and persistence of effort toward obtaining a goal Robbins, Judge, Odendaal &Roodt(2009). The motivation to work can be intrinsic or extrinsic and it is critical in the lives of employees given that it forms the essential reason for working in life Ololube (2006).

Intrinsic motivation is regulated by personal enjoyment, interest or pleasure and it involves the performance of an activity for the inherent satisfaction of an activity Ryan & Deci (2000). The extrinsic motivation is a sort of behavior that serves mostly to fulfil external demands, and so the source of motivation and causality for behavioris is external rather than internal Ryan & Deci

(2000).Motivation has the power to energize people not only by pushing them towards the right direction but by meeting their basic human needs of self-esteem, belonging, recognition, feeling of self-directedness and the ability to live one's ideals.

Maslow's Hierarchy of Human Needs Theory gives a picture of motivation. It is one of the most eminent theories of motivation. This theory suggests that people have five levels of human needs and they are ordered as follows: physiological, safety, belonging, self-esteem and self-actualization.

Methodology

This study intends to investigate the interrelation between leadership style and employee motivation in Yemen's audio media.

The objectives of this study are as follows:

-To study the impact of transformational leadership on employee motivation in Yemen's audio media.

-To study the impact of transactional leadership on employee motivation in Yemen's audio media.

Sampling

The nature of this study is descriptive-cum-analytical. The study is based on primary data. The study employed probability sampling, specifically simple random sampling. A sample size, n =30, employees from the four radio stations responded to the questionnaire. The sampling units, namely the radio stations, were divided into two parts: government and private. Twofrom each were randomly selected.The government-run radio stations are(1) Sanaa Radio station and(2)Marib Radio station. The private stations are(1) Radio Yemen Times and (2) Grand FM.

Data collection instrument

The study has employed a questionnaire to measure the two concepts: leadership and employee motivation. The first part of the questionnaire covered leadership and second employee motivation. The last part included personal information pertaining to age, gender, education and work experience. Links to the questionnaire were sent to the employees and responses had been elicited over five months, April through August 2019.

Multifactor Leadership Questionnaire (MLQ) was utilized to measure the leadership styles of managers. The employees ranked the leadership behaviour of their supervisors using a multiple-choice instrument to express their opinion by selecting one of the five options provided: 1-Always, 2- Often, 3- Sometimes, 4-Rarely, 5-Never.

Moreover, a ten-statement instrument was used to evaluate the level of employee motivation. The study adopted an established Likert-based instrument Rima (2014) to measure the level of motivation among employees. The questionnaire focuses on four parameters, namely job satisfaction, sense of accomplishment, work environment and recognition. The employees responded to the statements of the survey according to their level of agreement, disagreement or neutrality. The study has used standard data collection instruments that have established validity and reliability.

Figure 1: Conceptual Framework of the Study

IndependentVariable   **Dependent Variable**

Presentation of data analysis
The personal information solicited through the questionnaire includes the following:
(1) Gender (2) Age (3) Years of experience (4) Education
Chart 1: Gender-wise distribution of respondents

The chart indicates that 19 respondents are males and 11 respondents are females. That is to say, females constitute 36.7% of the respondents.
Chart 2: Age-wise Distribution of Respondents

The chart points out the majority of the respondents falls under category 20 to 30 of age.

Chart 3: Educational Degree of Respondents

The chart reveals that 90% of the respondents hold a Bachelor's Degree while 10% only are high school graduates.

Chart 4: Work Experience of Respondents

The chart says that the majority of the respondents are at the early stage of their careers with a span of 1 to 5 years of experience.

Analysis & Interpretation

The correlation coefficient, r and test statistic, t have been used to analyse the relationship between leadership and employee motivation. Based on the correlation coefficient analysis and t test of the data, there is an association between leadership and employment motivation. The correlation coefficient and test statistic values of the corresponding variables are given below:

Correlation coefficient

	Transformational leadership	Transactional Leadership
Employee motivation	0.609575	0.560964

Table:1

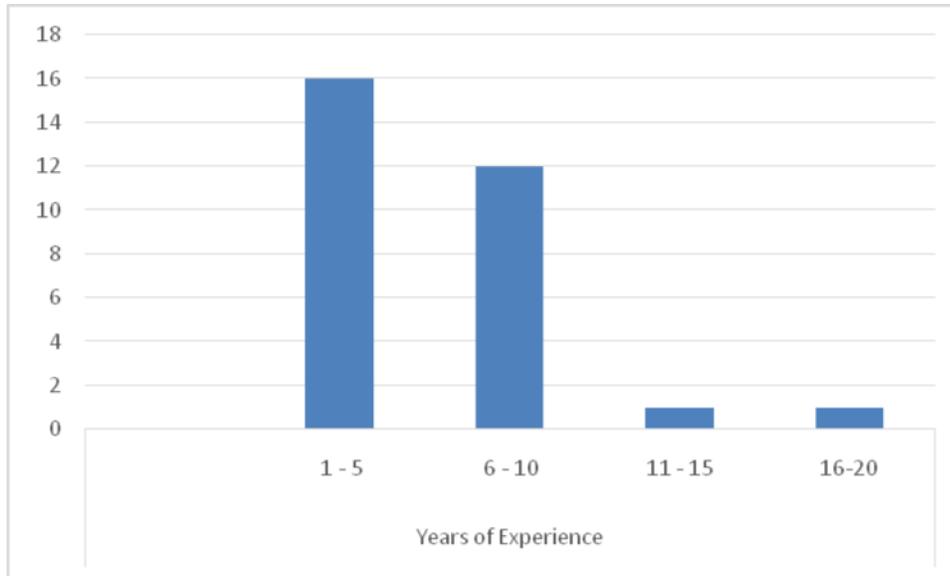The correlation coefficient, r, indicates the strength and direction of the linear relationship between leadership and employee motivation. In this article, the independent variable has two concepts -Transformational leadership and Transactional leadership. Correlation coefficient-r1=0.609575 has been calculated between transformational leadership and employee motivation and r2=0.560964 between transactional leadership and employee motivation. Thus, both values show a positive correlation between leadership and employee motivation.

Test statistic

	Transformational leadership	Transactional Leadership
Employee motivation	4.068944298	3.585646711

Table:2

The study also used the test statistic based on this formula: $t = (r\sqrt{n-2})/(\sqrt{1-r^2})$. The test statistic t has shown the positive relationship between the dimensions of the study.

Hypothesis Testing

This study aims to test the following hypothesis:

N0: There is no relationship between leadership style and employee motivation in Yemen's audio media.

The hypothesis test lets us decide whether the value of the population correlation coefficient ρ is "close to zero" or "significantly different from zero". This is being decided based on the sample correlation coefficient r and the sample size n.

Null hypothesis Ho: $\rho 1 = 0$, Alternate hypothesis H1: $\rho 1 \neq 0$

Correlation coefficient- r1=0.609575 has been calculated between transformational leadership and employee motivation. It is obvious that there a strong positive relationship between the transformational leadership style and employee motivation.

Null hypothesis Ho: $\rho 2 = 0$, Alternate hypothesis H2: $\rho 2 \neq 0$

The Correlation coefficient r2=0.560964 between transactional leadership and employee motivation has been calculated. The result indicates a positive relationship between leadership and employee motivation.

Therefore, evidence is established to conclude that there is a significant linear relationship between leadership and employee motivation because the correlation coefficient is significantly different from zero.

The null hypothesis is rejected.

The result of this study upholds previous research works that found a connection between transformational leadership and employee motivation Bass and Avolio (1994). The study also emphasizes previous studieswhich concluded thatthe transactional leadership style has a significant effect on employee motivationErkutlu (2008). The employees' feelings on their job are tied to the behaviour of their leaders who can either make or break the spirits of the staff.

Conclusion

This study was conducted to explore the association between leadership and employee motivation in the Yemeni audio media. The finding of the study has revealed the positive linkage between leadership and employee motivation in selected radio stations in Yemen. The use of transformational and transactional leadership styles in the workplace has influenced the employee motivation. The study concludes that the leadership style of the audio media managers in Yemen has a positive bearing on the level of employee motivation in a country where journalism is a risky job, and media workers are under constant threats due to the complex political situation and the absence of press freedom. The managerial leadership style in the Yemeni audio outlets has been capable of keeping a good degree of employee motivation despite the present dire media climate.

References:

Bass BM, Avolio BJ (1994). Improving organizational effectivenessthrough transformational leadership. Thousand Oaks, CA: SagePublications

Bass, B. M. (1998). Transformational leadership: Industrial, military, and educational impact. Mahwah, NJ: Erlbaum.

Bass, B. M. (1985). Leadership and performance beyond expectations. New York: Free Press.

Blanchard, K. (2009). Leading at a Higher Level. New Jersey: Upper Saddle River.

Burns, J. M. (1978) Leadership. New York, NY: HarperCollins.

Chaleff, I. (1995). The courageous follower: Standing up to and for our leaders. San Francisco: Berrett-Koehler Publishers.

Chowdhury, Rima (2014). A study on the impact of leadership styles on employee motivation and commitment: An empirical study of selected organisations in corporate sector, Mumbai, India.

Conger M (2002) Leadership learning to share the vision. Organizational Dynamics 19 (3): 45-52.

Conger, J. A. (1999). Charismatic and transformational leadership in organizations: An insider's perspective on those developing streams of research. Leadership Quarterly, 10(2), 145-170.

Erkutlu H (2008). The impact of transformational leadership on organizational and leadership effectiveness, Journal of Management Development, Vol. 27 No. 7, pp.708-726.

HellriegletB. (2004), Organization Theory: Structure, Decision and Application. New Jessy: Prentice-Hall International Inc.

Jansen, J. J. P., Vera, D., &Crossan, M. (2009). Strategic leadership for exploration: The moderating role of environmental dynamism. The Leadership Quarterly, 20, 5–18.

Kirkan K (2011) The Effect of emotional intelligence on emotional competence and transformational leadership. Pr Quest UME Dissertation Publishing.

Kotter, J. (1999). what leaders really do. Boston, MA: Harvard Business Review Book.

Lussier, A. 2010. Effective Leadership. 5th ed. Cengage learning. South Western.

Northouse, P.G. 2001. Leadership Theory and Practice, second edition. Thousand Oaks, CA: Sage Publications, Inc.

Ololube, O. (2006). Teacher job satisfaction and motivation for school effectiveness: An assessment. Essay in Education, 18:1-19.

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behavior. The Leadership Quarterly, 1, 107–142

Robbins, S.P., Judge, T.A., Odendaal, A. &Roodt, G., (2009). Organisational Behaviour: Global and South African Perspectives. 2nd ed. Cape Town: Pearson Education Inc.

Ryan, R.M. & Deci, E.L. 2000. Intrinsic and extrinsic motivation: Classic definitions and new directions. Contemporary Educational

Storseth, F. (2004). Maintaining work motivation during organisational change. International Journal of Human Resource Development Management, 4 (3), pp. 267-287.

Yukl, G. (1999a). An evaluation of conceptual weaknesses in transformational and charismatic leadership. The Leadership Quarterly, 10(2), 285–305.

Yukl, G. (1999b). An evaluative essay on current conceptions of effective leadership. European Journal of Work and Organizational Psychology, 8(1), 33–48.

Innovative Teaching Techniques - A De-Stressor Among Teachers & Learners

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Abstract : Learners learn from both parents and teachers and the influence of teachers are high in moulding the behaviour learners and in this current scenario the way the knowledge gets transformed from teacher to student plays a vital role in better understanding the concept and accumulating the same as assets for future by learners. Excessive researchers now days pin point that if a child is affected by stress at school levels then it will be a reflector for him/her for his rest life. The studies also throws light that if a teacher is stress out, then the student will also show the stressful behaviours and non clarity in the aspects taught can be one among the stress factors of stressful behaviours in learners. Learners get stressed very easily and the stress levels and ill health conditions are high for some learners throughout the education pace. This phenomenon is affecting not only learners but also the teachers and parents too. In this context, an attempt is made to find out whether the innovative teaching methods can help learners and teachers to get rid of their stress levels and make the activity of knowledge gaining a joy filled exercise and hence more emphasis can be given to 'what is learned and accumulated' as knowledge assets for future life.
Key words: *Stress, Education, Innovative Teaching Techniques, parents, teachers*

Introduction:
We Indian's who once had a "Gurukula Education System" (where learners stay away from home for long periods, disconnected from family and stay with guru and learn from him ("Gurukula: A Family with Difference - An Exposition of the Ancient Indian System of Education," n.d.). The teacher was called as 'Guru' and the learner was called 'Shisya' and in return work for him and finally after completion of education offer him 'Gurudakshina' as a token of gratitude) are now in a era of accessing the information at our fingertips. Education is now very much simplified and to an extent that every minute information's can be fetch even on our personal mobile gadgets ("Comparative study of ancient gurukula system and the new trend of guru-shishya parampara," n.d.)

Objective of the study:
To check whether the innovative teaching methods and the transfer of knowledge through these methods help the learners and teachers to get rid of stress caused by the education system in India

Methodology: The study is based on secondary data and was collected from 350 learners and 150 teachers. The sample was a mixture of school, college and university learners and teachers. The effects of stress before and after the use of innovative teaching methods were ascertained using the questionnaire based discussions with teachers and learners. The variables studied during the study included understanding the concepts by the students after using the innovative teaching technologies, the easiness of explanation and the ease of the process of conveying of concepts with modern teaching aids, the assessment of academic performance , the change in shift of exam phobia among learners, creativity thinking among the learners, the effect on stress, the impact on activity based learning, team based work culture and e-learning after the introduction of innovative teaching technologies was ascertained.

Relevance of the study:
Are our learners really stressed?
The figure shows the sources of stress faced by the learners and it shows that the major stress are caused by the influence of school work / home work, being at school/interacting with classmates and parents-34 %, 11 % and 17 % respectively. The figures shows an alarming fact that the stress caused by caused from school atmosphere is 45 % and which is around the half of the stress affecting arena of learners. Hence a great importance is required towards the immediate arrest of the stress causing factors at

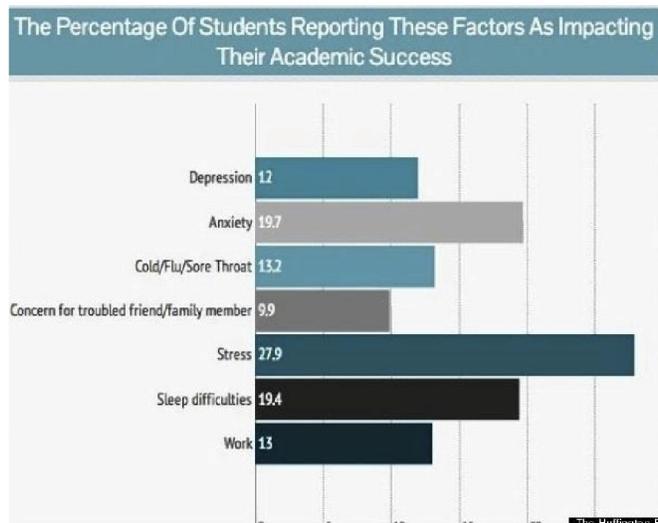schools. ("http://canacopegdl.com/keyword/stress-pie-chart.html," n.d.)

Indian Education System:
 Policy in India is prepared by the Centre Government and State Governments at national and state levels respectively.(*The National Policy on Education (NPE)*, 1986) has provided for environment awareness, science and technology education, and introduction of traditional elements such as yoga into the Indian secondary school system (*India 2009: A Reference Annual (53rd edition)*, 2009). The central and most state boards uniformly follow the "10+2+3" pattern of education   (*National Council of Educational Research and Training*, n.d.). In this pattern, study of 10 years is done in schools and 2 years in Junior colleges, ("National Policy on Education (with modifications undertaken in 1992)," n.d.) and then 3 years of study for a bachelor's degree. (Vyas, n.d.). The first 10 years is further subdivided into 4 years of primary education, 6 years of High School followed by 2 years of Junior colleges ("National Policy on Education (with modifications undertaken in 1992)," n.d.).

According to the report of (*Mental health concerns among college learners*, n.d.) , the performance level of each student is different and the effect of each stress varies among each student. But it's a fact that if a student is affected by stress then it will surely lead in affecting his academic performance

The figure shows that 27.9 % of the learners are affected with respect to their academic performance on account of stress related factors.

The figure clearly speaks that 39.56 % of the learners are very much stressed between their classes and other responsibilities and often complain that it's beyond their capacity of doing it and they really have a little time for them. 54.24 % are also stress but somehow

managing their part. Combining this we could infer that 93.8 % i.e., near to 94% of learners are affected by stress and only 6.2 % are out of the affect of stress ("https://blog.niche.com/portfolio_item/how-stressed-are-school-learners/," n.d.)

The Modern teaching methods used today:

Technology has a dominant role today for the better education to younger generation by using the aids which include computers, LED (Light Emitting Diode) screens or the interactive electronic white boards, over head projectors, power point slides, games, e books etc.., With Projectors, it helps the teacher to convey easily and quickly and helps the student for better understanding of the subjects, computers and internets have made learners easy to find solution for problems with a hit on a single search button on Google, and with e books readers its easy to fetch any book online and read them in budget. The usage of more technology will help the teachers to convey accurately and helps the learners in better understanding by putting only less efforts

According to the study done by Dr.Rita Dunn & Dr.Kenneth Dunn, (Dr.Rita Dunn & Dr.Kenneth Dunn, n.d.) states that 'learners are affected by their:

- Immediate environment like light sound, temperature and design
- Own emotionality's like motivation, persistence, responsibility, need for structure or flexibility
- Social need like self, pair, peer, team, adult etc.,
- Physical needs like perceptual strengths, intake, time, and mobility.

This shows that the learners leaning capability also depends on and is more effective and efficient if they are taught in the ways to which they can more relate easily' and there comes the importance of using teaching aids for creating better understanding and transformation of knowledge from one domain to the other.
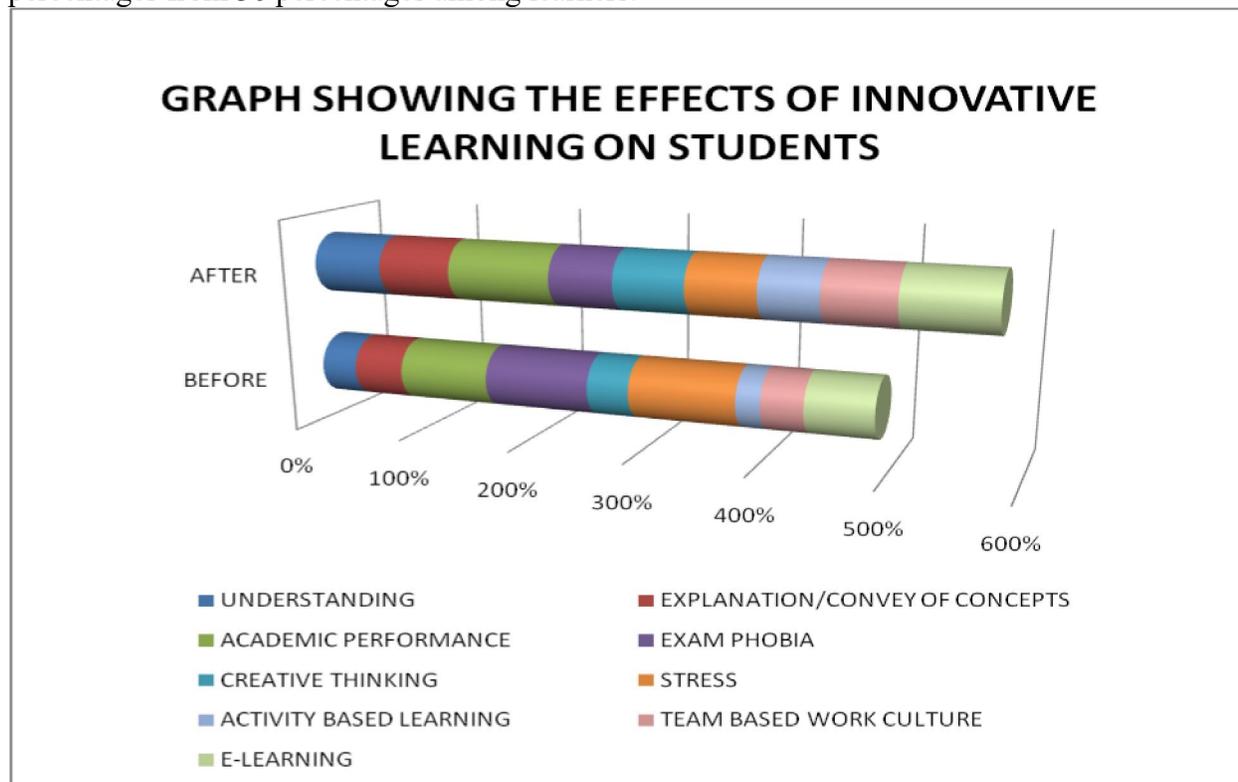
Learning theory and behavioral psychology:

"John B Watson" (1878-1958) was the first to study that how the learning processes actually affects the behavior. According to him, learning is defined as the process leading to relatively permanent behavioral change or potential behavioral change. It's nothing but the process of how

we learn and how we put our learning to the surroundings which we belong to and therefore how we interact and behave with our fellow beings (SINGH, 2014)

Here comes the question, why we learn, what the exact reason for our leaning process is. Earlier the education was the transaction of knowledge and now it's more to 'how is this been transferred and there comes the importance of the transformation of knowledge and the importance of innovations in the teaching arena.

Findings:

On analysis, it was found that innovative teaching technologies showed a positive impact on stress levels of learners. It was found that the stress faced by the learners with normal teaching aids was high to the extent of 91 percentage and which showed a drastic drop to 59 percentages among the respondents. The reason or the same is told that, the innovative teaching technologies provided the pace for better understanding of concepts from 33 percentages to 63 percentages in nature, which is all most the double of the earlier. Teachers also are of the opinion that there is easiness in explaining the concepts well and are able to convey the inner meaning and is made easy to the extent of 65 percentages from 45 percentages. It was also seen that the academic performance has enhanced to 91 percentages from 81 percentages. The graph showed a dip on exam phobia from 92 percentages to 56 percentages which was a positive sign of using innovative teaching technologies for the purpose of teaching. The use of innovative teaching technologies also showed an increase in activity based learning from 20 percentages to 50 percentages. The change in team based work culture was 60 percentages from 35 percentages, e-learning initiative among learners which included both students and teachers showed an increase to 75 percentages from 56 percentages. The creative thinking capacity showed a growth to 60 percentages from 36 percentages among learners.

GRAPH SHOWING THE EFFECTS OF INNOVATIVE LEARNING ON STUDENTS

Conclusion:

Education should be always viewed in a wider perspective rather than mere clearing of exams and getting promoted to next levels. Teaching to find his true perspective, it should be taught in a a way that the knowledge in imbibed by the student as a whole in the right meaning and absolute perspective. A teacher is a person who pin points the arena where we need to look for and guide the learners to see the things in a big perspective. For this the new innovations in teaching like projectors, computers, internet etc., plays a vital role. As the result of true transformation knowledge, the stress experienced by a teacher to teach is resolved, the concepts when explained clearly with more visuals and audio-better understanding is seen in learners and there by reducing the stress level of the learners and one of world's hindrance, the exam phobia is reduced . The learners are trained in the right manner and thereby it reduces the burden on parents and sometimes even children start teaching their parents with these innovative methods and the education cycle runs continues for ever spreading more knowledge easily and clearly.

References

Comparative study of ancient gurukula system and the new trend of guru-shishya parampara. (n.d.). *American International Journal of Research in Humanities, Arts and Social Sciences*, *ISSN (Onli*.

Dr.Rita Dunn & Dr.Kenneth Dunn. (n.d.). *Teaching Students Through Their Individualm Learning Styles:A Practical Approach*.

Gurukula: A Family with Difference - An Exposition of the Ancient Indian System of Education. (n.d.).

http://canacopegdl.com/keyword/stress-pie-chart.html. (n.d.).

https://blog.niche.com/portfolio_item/how-stressed-are-high-school-students/. (n.d.).

India 2009: A Reference Annual (53rd edition). (2009).

Mental health concerns among college students. (n.d.).

National Council of Educational Research and Training. (n.d.).

National Policy on Education (with modifications undertaken in 1992). (n.d.).

SINGH, P. (2014). *ANALYTICAL APPROACH IN BEHAVIOURAL PSYCHOLOGY*.

The National Policy on Education (NPE). (1986).

Vyas, N. (n.d.). (30 June 2012). "10+2+3: A Game of Numbers?". Retrieved. *India Today*.

Limiting Alternative: A Direction to Future in Configuration Management

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Abstract:

Configuration Management (CM) is an inevitable Management process in complex product development projects especially in R&D organisations and aerospace industries. The long Product Life Cycle (PLC) and high level of uncertainty prevailing at all phases of PLC demands a very efficient CM process. The most challenging activity in CM is the change control and associated decision making. This decision making is a techno-managerial process aimed to select the best alternative considering multiple criteria. This problem can be solved using any of the Multi Criteria Decision Making (MCDM) tool. However, the decision to select the best alternative depends only on the current situation. Since the Product in aerospace industry is having very long PLC, the decision taken today may not be the best as the project progresses.

In this paper an attempt is made to elicit future directions based on MCDM results. The concept of a Limiting Alternative (LA) is introduced to identify the vulnerability of the current best alternative and possible candidates for the future. The LA concept also gives a direction to the CM process to look for new alternatives with targeted properties. The latest trends like Nano TechnologyandAdditive Manufacturing can yield materials with this type of targeted properties. Thus the introduction of LA gives a futuristic view to the CM decision making process.

Key Words: Configuration Management, Aerospace Industry, MCDM, Limiting Alternative

1.   Introduction

Configuration Management (CM) is a Product management discipline that provides methods, process and technologies to identify and control subsystems/parts/ items/process to ensure integrity and quality of complex products under development. The CM concept was originated in Department of Defence (DoD) of USA in early 1950's(Quigley, 2015).DoD developed the concept of CM to ensure complete control over product development and change management. When complex systems are getting developed using multiple agencies there is every chance that some changes in parts, if not properly addressed, will pose serious problems at a later stage of product integration/testing/deployment. This will results in waste of time, effort and money .DoD faced many similar issues and as a solution CM was developed and deployed in all projects. Soon the success of CM spread into similar industries especially aerospace and large R&D organisations(Lindkvist*et al*, 2013, Burgess *et al*,2005, Werner *et al*, 2010). Yet another area in which CM found success is the software development projects.The most challenging function of CM is the change management. Changes are inevitable in complex product development projects. Reasons for changes are both internal and external. The centralised agency to discuss and decide on the change proposal is the CM team. It is hard to find a definite rule to accept or reject a change proposal. CM standardssaythat the change process is to be addressed considering specific nature of the industry/organization(NASA-STD-0005). Often multiple

alternatives will be there to substitute a given system/part. All these alternatives are to be assessed and the best is to be selected.

All relevant criteria to be considered to assess the suitability of an alternative are to be identified, again it is industry/organization specific, and the alternatives are to be evaluated with respect to each criterion. Typically this problem can be formulated as a Multi Criteria Decision Making (MCDM) problem and standard MCDM tools can be used for solutions (Kumar and Subramoniam, 2015).

However, the optimality of a decision depends on the life cycle of the given project. The current optimal solution may not be the best for the future. This is more so in aerospace and defense industries wherein product life cycle is large (as high in 50 years). This issue is discussed in this paper and a solution to future direction is proposed. A new concept called Limiting Alternative (LA) is introduced to derive move insight into the given problem. The LA also gives a direction for future developments.

A hypothetical solution of CM problem using Analytical Hierarchy Process (AHP)(Saaty, 2008) is taken and the concept of LA is demonstrated. A few questions to be addressed, while taking a decision on a change proposal to arrive at the best alternative for future,are also addressed.

2.   CM decision making in aerospace industry

The decision making in CM is to choose the best alternative, among the available. Generally this is a subjective process. The decisions heavily depend on the expertise of the team involved in decision making, often leads to biased decisions. To eliminate this bias attempts are made to identify the criteria on which the alternatives can be compared and the best suited can be selected. MCDM methods can be easily applied for both criteria evaluation (to find weight)and alternative evaluation(to rank).

Major criteria to be considered in aerospace industry are discussed in many literatures (Kidd, 2001, Burgess *et al*., 2003, Ivanco*et al*.,2017). The following are the criteria considered generally in any aerospace space industry.

  i.   Compatibility
 ii.   Reliability
iii.   Manufacturability
 iv.   Mass
  v.   Cost

However, the weight of these criteria may vary from industry to industry. The weight of each criterion can be derived using any of the MCDM method.

Depending upon the nature of the parts/process under change all or some of the above criteria will be applicable. The criteria which are applicable for the given decision making problem is to be decide by the CM team.

To progress the discussion further 'weight'forthe above criteria are assumed as given in bracket. Compatibility (0.30), Manufacturability(0.8), Mass (0.10), Reliability (0.45) and Cost (0.07).

3.   A direction for optimal solution

Based on the results from MCDM analysis one can derive many useful information about the suitability of each alternative and decision making also can be done with fairly good accuracy. However, certain vital questions like the following cannot be answered especially when the project under consideration is having very long life cycle, typically more than 10 years.

  i.   Is this the optimal solution,considering long product life cycle?

ii.   Is there any feasibility for improvement in any of the alternative?
iii.   In which direction one need to look forward in the future?

Pursuing these questions it is understood that some limiting conditions to be evolved so that within a frame work one can search for better alternatives. Towards this it is proposed to introduce the Limiting Alternative (LA). The Ideal solution(IS) defined in TOPSIS (Hwang C.L. and Yoon K., 1981)is having very limited scope of eliciting the trends available in problem because the use of IS is limited to establish the quality of decision making done. The Limiting Alternative (LA) is defined in such a way that the future scope of improvement is inbuilt in the solution. Limiting Alternative is a hypothetical alternative which if available can be ranked highest in pair wise comparison of alternatives with respect to each criterion. The ranking in pairwise comparison is termed as 'intensity of importance'and the values ranging from 1 to 9 where 9 indicates highest possible order of affirmation on favouring one alternative with respect the other and 1 indicates equal importance for both (Saaty, 1980).

1.   Limiting Alternative

The limiting condition or the limit of the solution can be found out by introducing Limiting Alternative as a hypotheticalcandidate and analyse each alternative with respect to LA.The Ideal Solution defined in TOPSIS is considering the highest/lowest weight obtained in the matrix to generate the positive/negative IS. The major limitation of this concept is that the upper and lower bound of the problem is defined considering only the given alternatives. The scope of improving the present best alternative is denied, at least in certain criteria where the alternative is having highest weight. The limiting candidate is one which should be better than all other real candidates or it is the best, one can ever found. Therefore, a limiting alternative is to be defined and feasibility/scope of improving all the alternatives is to be studied before taking the decision. Here, it is required to assume that the present combination of alternatives considered is exhaustive at least in the context of study and a better alternative can be developed only in the future with upcoming technologies.

The approach followed in this paper isto define LA within the frame work of AHP to maintain the generality of the solution and to have compatibility with the analysis already carried out.LA is the one which is rated with maximum possible relative importance against the lowest performing candidate in the pairwise comparison with respect to each criterion.The'intensity of importance' of LA is assigned as 9 when compared with the lowest 'intensity of importance' alternative for a given criterion. In other words the alternative with lowest 'intensity of importance' is considered as the base alternative for the given criterion. It should be noted that the base alternative will be different for different criterion. It is proposed to use the existing pairwise comparison and the LAis introduced as a new alternative in the same pairwise comparison matrix by suitably deriving the 'intensity of importance for LA with respect to all other alternatives. The reason for considering the lowest weighed alternative in each criterion as the base alternative is that any alternative with less than this weight is not fit to be included as an alternative. The 'intensity of importance'of LA with other alternatives is derived in a proportionate manner. This relative ranking is done to place the LA in the existing decision making matrix itself as a new alternative without altering the original preferences elicited by the experts.The following example will give more clarity on the approach explained above to derive the 'intensity of importance' of LA with respect to other alternatives.

A typical problem in aerospace industry is considered to demonstrate the concept. The'changeproposal'isto replace the material of construction of a component. The existing

material is designated as 'M1' is having some deficiency and this deficiency was realised during the midcourse of product life cycle. After exhaustive study the design team could identify three alternatives designated as M2, M3and M4. The existing candidate is also considered as one alternative and analysis is done using AHP. Theranking obtained for theproblem is M1(4), M2(1), M3(2) and M4(3), the numbers given in the bracket is the ranking obtained.Based on the above results material M2 is selected in place of M1.

To demonstrate the application of LA the required tables are created and solved using MCDM method.Let us assume that with respect to the criterion 'compatibility', M2 is ranked highest and M4 is ranked as the lowest. In this case the base alternative is M4 and the LA is given 'intensity of importance' of 9 points against M4. The 'intensity of importance'of LA against other alternatives is derived in proportion to their ranking with M4 using the formula given below.
S(LA,Mi)=9/S(Mi,M4)

Where S(LA,Mi) is the 'intensity of importance' of LA with respect to material Mi and S(Mi,M4) is the 'intensity of importance' of material Mi with respect to M4. With this data new pairwise matrix is generated by adding LA also as one alternative.

The new pairwise comparison matrix has n+1 alternatives, where n is the number of alternatives available in the original problem and the n+1th candidate is the LA.

In the same line the LA is placed in the respective matrices for each criterion and the rank matrix is reworked. It is to be noted that during this process consistency ratio of the matrices also improvedbecause the 'intensity of importance' derived from the existing values.

5   Revised Rank Matrix

Using the revised pair-wise comparison data the priority matrix for the problem considered is reworked.   There will not be any change in priority of existing alternatives when LA is introduced. The revised ranking obtained is given in Table 1.

Table 1. Revised Ranking

Alternatives	Rank
LA	I
M1	V
M2	II
M3	III
M4	IV

6   Analysis and Findings

The revised ranking obtained for each criterion clearly indicates that the LA is the best for all the given criteria and hence proved that the method of defining LA is giving intended results. The ranking of alternatives with respect to the attributes (the decision making matrix) is plotted and given in figure 1.

Figure 1. Plot of relative significance of alternatives

This plot vividly indicates how each of the given alternatives is close to the LA with respect to a given criteria. The Ideal Solution in TOPSIS is the curve joining all the maximum points in the plot of current alternatives and it will be always below the LA. The curve belongs to the LA can be termed as the Limiting Curve for the given problem. A close look indicates that with respect to certain attributes the gap between the LA and the other alternatives is wider and in some other case it is closer.

To derive more information about the role of the criterion a weighted plot is made, as given in figure.2. In this figure the score of each alternative against a given criterion is multiplied with the weight of respective criterion. This approach makes the solution more specific to the given problem and the given echo system. Figure.2 vividly indicates the nature of the problem. The following information can be easily deduced from this graph.

Figure 2. Plot of weighted significance of alternatives

With respect to the criteria 'compatibility' and 'reliability' the LA is well above the existing alternatives and next comes 'manufacturability'. However, with respect to 'mass' and 'cost' there are alternatives which are very close to LA. This indicates that the stake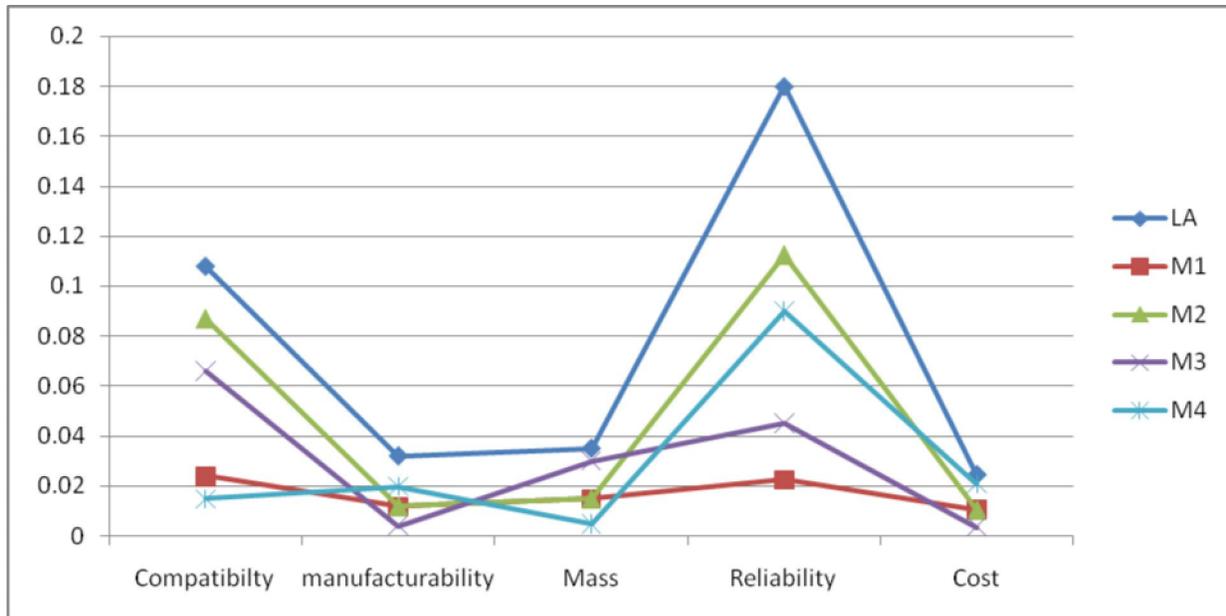holders are happy with the performance of the current alternatives in terms of 'mass' and 'cost' and they have given high rating for some alternative. However, the stakeholders not give high rating to any of the existing alternatives with respect to 'reliability' , 'compatibility' and 'manufacturability'. The gap is more in the case of 'reliability' and hence attempt should be made to propose the new material with higher reliability than the existing alternatives. In other words there is a scope for improving the reliability of existing alternatives also to make it more close to the LA. In fact the present world of fast development it is possible to develop non-conventional materials like composite material or 'Nano Technology' based material with targeted properties. In the case of 'manufacturability' also improvement is possible by adopting newer technologies like Additive Manufacturing and other nonconventional methods.

7   Discussion

The concept proposed in this paper is to get more knowledge on the entire system and a direction for the decision making with future perspective. With the information available from the typical decision matrix a decision maker will definitely go for M2 and his second choice will be M3. However, by looking at Figure 1 &2 one can revisit his decision due to the following:

i.   With respect to 'compatibility' there is a wide gap between the LA and M4, one can assess this and the possibility of improving each alternative in this direction can be thought off. The compatibility of M4 is less may be because of the lack of experience with this material in the current scenario. Whereas elsewhere in the world this material would have beenused successfully by developing techniques to improve its compatibility by special coating or some other new technology.

ii.   The 'manufacturability' is assessed with respect to the current capability. A new manufacturing method can change the ranking, this also to be looked into while selecting the alternative. A better/improved fabrication method can make M3 really more competitive.

iii.   In the case of 'mass', it is an inherent property and improving the same is practically nil. However new concept like Nano Technology or 'composite wrapping' can achieve less system mass. In this case even M4 may become a serious competitor.

iv.   Reliability is a criterion that can be improved by better methods and difference in approach. M3 is ranked low may be because it is relatively new to the current echo system and has very less experience with it.Reliability can be improved to a great extent by controlled experiments. When product life cycle is fairly long this becomes an important direction of thinking for decision making.This needs to be explored considering the long product life cycle.

v.   With respect to 'cost' there is no much scope for improvement as this criterion is having very less impact on the overall decision making. However, a proper assessment of the supply chain can lead to a breakthrough in this area. Also in the present scenario the criterion 'cost' is given very low weight by the stakeholders.However, in future the industry perspective itself may change and cost can become a strong criterion. The competition in space exploration is intensified by the entry of 'Space X' in to the market and now all need to seriously think on cost cutting.

Considering the above arguments, if the decision is made with a long term perspective, one can go for M3or M4 instead of M2 considering the scope for improvement. The above argument was possible only with the introduction of LA as proposed in this paper. The weighted plot of alternatives is a vital information source and one can derive many inferences depending on the echo system in which it is operating.

8   Future scope of study

One can formulate the above problem as an optimization problemif the cost component for improvement in each area is considered. The cost for percentage improvement in each criterion is to be worked out and then the additional cost to be incurred for improvement is to be minimized. However, such an attempt to add cost of improvement depends on many external factors and these are to be accounted with due care.

9.   Conclusion

The decision making in CM is always challenging due to multiple criteria involved. Usually, these criteria are measured in different scales and most of them are intangible. Decision making under this circumstance is more of subjective in nature and is often biased. In order to eliminate the subjectivity in the decision making the problem is formulated as a decision matrix with hierarchy of goal, criteria and alternatives and solved using MCDM method.The solution thus obtained is optimal for the current instant of Product Life Cycle (PLC). In the case of aerospace products the PLC is very long and a decision optimal today may not be optimum in the future. Also it is required to look forward for new alternative as part of 'continuous improvement'.To elicit such information from an MCDM analysis a new concept named as Limiting Alternative

(LA) is introduced in this paper. The LA can give a direction to the project team to look forward for new alternatives which may come up or developed in the future. Also LA concept can point out the scope of improvement in the currently selected alternative and its vulnerability with respect to each criterion.

The introduction of LA concept enables the decision makers to assess the feasibility of improvement for every alternative with respect to each criterion. The definition of LA is done in such a way that it acts as the limit of each criterion under study for the current problem. LA also gives a guideline to look for new alternatives which can be developed by new technologies. In the case of the example problem discussed it is possible to realise new material with lesser mass, more compatible and more fabrication friendly employing Nano Technology, Additive Manufacturing or Composite material technology. The reliability of a material can be easily improved by controlled experiments.

References

Burgess, T.F., Byrne, K. and Kidd, C. (2003),"Making project status visible in complex aerospace projects", *International Journal of Project Management* Vol.21, No. 4, pp 251-259.

Hwang, C.L., & Yoon, K. (1981). Multiple attribute decision making: Methods and applications. Heidelberg: Springer. http://dx.doi.org/10.1007/978-3-642-48318-9TOPSIS

Ivanco M. Hou G. And Michaeli J. (2017) "Sesitivity analysis method to address user disparities in the analytic hierarchy process", *Expert Systems With applications,* Vol. 90, pp 111-126

Kumar C.S. and Subramoniam S. (2015), "Conquering Configuration Management Conundrum", *Twelfth AIMS International Conference on Management*, 2015, ISBN:978-1-943295-01-2(Print) PP 61-65.

Kidd C. (2001), "The case of Configuration Management", *IEE Review,* Vol. 47, No. 5, ,pp 37-41.

Lindkvisit C, Stasis A. and Whyte J. (2013) " Configuration Management in Complex engineering Projects", in *2nd International Through-Life Engineering Science Conference-Procedia CIRP II.*, pp 173-176.

NASA-STD-0005, 2008, NASA Configuration Management (CM) Standard, NASA, Washington DC.

Quigley J.M. and Robertson K.L. (2015),*Configuration Management Theory, Practice and Applications*, CRC Press, Taylor & Francis Group, UK.

Saaty L.T. (1980), *The Analytic hierarchy Process*, McGraw Hill, New York.

Saaty L.T. (2008), "Decision making with the analytic hierarchy process", *International Journal Services Sciences*, Vol.1, No. 1 pp. 83-98.

Werner C., Corea C.,Santro P., Schats M.,Murta L. and Lyra F., 2010," Adoption of Configuration management in the industry: Strategies and issues learned", *Clei Electronics Journal*, Volume 13, Number 2, Paper 8

Opportunities Of Blue Economy In Indian Ocean: A Conceptual Approach

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Abstract

Blue economies are gifted with specific resources which could determine their way of development in future. All the coastal nations in the world are reliant on oceans for fishing, minerals, oil & gas, rare earth metals, renewable energy and other living and non-living resources for earning livelihood, achieving holistic growth, empowering native coastal communities and attaining greater social and economic inclusion. The role of blue economy aims at optimum and sustainable use of oceanic resources for growth and development is critical for the coastal nations. The countries in the Indian Ocean region had very strong civilization linkages evident in maritime trade, cultural exchanges, tourism, diplomatic relations etc. This article is purely a conceptual approach on the opportunities of blue economy in Indian Ocean.

Keywords: *Blue Economy, Resources, Economic Issues, Indian Ocean.*

Introduction

Indian Ocean region covers varied areas of rich ocean scattering over three continents and serves as a major link for trade, investment and technology cooperation between the littoral countries. Indian Ocean is a key sea route for the world connecting India, China, Far East, East Africa, South Asia and the Middle East. Given the immeasurable bequest of oceanic resources, the littoral countries representing the Indian Ocean Rim Association (IORA), countries consider the significance of exploiting blue economy for economic and social development in the region. With progression in exploration technology, deep-sea mining could let loose huge potential for exploration of hydrocarbons, petroleum, natural gas, and rare earth metals. In addition, the demand for ports and shipping services would flourish as seaborne trade grows in the future. The rich flora and fauna attracts a large number of tourists from different parts of the World.

There has been a continuous discussion in the academic and policy circles about substitute discourses on development policies particularly after the collapse of dirigisme and greater acceptance of market mechanisms since the mid-1980[s] in all important spheres of social and economic life in different communities worldwide. A new set of terminologies were coined to reorient the conventional development model to be more people-centric and equitable which include 'sustainable development', 'green economy', 'human development', 'inclusive growth', etc. The concept of 'blue economy' is considered as one of those epochs of development thinking.

Definitions of Blue Economy

The concept of blue economy is still at an evolving stage where there is yet to be any all-inclusive definition which would be suitable from the operational point of view. In the literature, blue economy has been used synonymous to 'marine economy', coastal economy', ocean

economy', 'green economy' and so on. At the United Nations Conference on Sustainable Development held in Rio de Janeiro in 2012, blue economy was viewed as ocean economy that aims at the "improvement of human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.

According to Colgan (2004), "the ocean economy is that proportion of the economy which relies on the ocean as an input to the production process or which, by virtue of geographical location, taking place on or under the ocean. It is a function of both industry and geography. While most of the ocean economy (for example, boat building, seafood retailers and many ocean instrumentation, equipment and surveying industries) may be located in non-coastal region". The marine sector comprises of five major sectors including commercial seafood, marine transportation, coastal tourism and recreation, marine science and technology, marine-related construction and infrastructure. The European Commission (2012) has defined the concept of blue economy as "all economic activities related to the oceans, seas and coasts. Table 1 displays taxonomy of blue economy sectors and activities.

Table 1
Taxonomy of Blue Economy Sectors and Activities

Sector	Activity
Fishing	Capture fishery, aquaculture, seafood processing
Marine Biotechnology	Pharmaceuticals, chemicals, seaweed harvesting, seaweed products, marine derived bio-products
Minerals	Oil and gas, deep-sea mining (exploration of rare earth metals, hydrocarbon
Marine Renewable Energy	Offshore wind energy production, wave energy production, tidal energy production
Marine Manufacturing	Boat manufacturing, sail making, net manufacturing, boat and ship repair, marine instrumentation, aquaculture technology, water construction, marine industrial engineering
Shipping, Port & Maritime Logistics	Ship building and repairing, ship owners and operators, shipping agents and brokers, ship management, liner and port agents, port companies, ship suppliers, container shipping services, stevedores, roll-on roll-off operators, custom clearance, freight forwarders, safety and training
Marine Tourism & Leisure	Sea angling from boats, sea angling from the shore, sailing at sea, boating at sea, water skiing, jet skiing, surfing, sail boarding, sea kayaking, scuba diving, swimming in the sea, bird watching in coastal areas, whale/dolphin watching, visiting coastal natural reserves, trips to the beach, seaside and islands
Marine Construction	Marine construction and engineering
Marine Commerce	Marine financial services, marine legal services, marine insurance, ship finance & related services, charterers, media & publishing
Marine Information and	Marine engineering consultancy, meteorological

Communication Technology (ICT)	consultancy, environmental consultancy, hydro-survey consultancy, project management consultancy, ICT solutions, geo-informatics services, yacht design, submarine telecom
Education and Research	Education and training, research and development

Source: Compiled from Morrissey, Stephen, Michael & Cathal (2010).

Importance of Blue Economy: Key Economic Issues
There are several good reasons to pursue with the regional agenda of blue economy which is gaining ground in the Indian Ocean region. In this regard, the region's economic and strategic interests are intricately linked to ocean economy as the region is dependent on ocean for critical issues including food security, livelihood security, minerals, energy security, industrial activities and various key services activities. Following Rio+20 conference in 2012, it emerged prominently about the independent development thinking regarding the blue economy without seeing it as a rejoinder to the sustainable development agenda. Some of the opportunities provided by the blue economy are briefly discussed below to highlight its relevance.

i. Food Security
Blue economy has a major role in securing food security for the people. The fisheries sector including aquaculture and aquatic plants, contributes sizable proteins, fats and calories supply which supports food security situation in a country. Persistence in the decline of catch fish has been a major concern for the world economy. Fishing nations in the region have taken necessary steps to promote aquaculture which helped them meet domestic demand for fish and export to other markets. In the context of blue economy, higher fish production with lower environmental damage is possible through polyculture, specie diversification, optimal feeds and feeding, prevention of diseases and so on.

ii. Demand for Protein
Demand for protein can be effectively addressed by the blue economy. Fish is a crucial source of animal protein even in countries where the daily average per capita fish consumption is low compared to developed fish-consuming nations. Fish in small quantities can have significant nutritional impact as it is a concentrated source of protein and contains essential fatty acids and micronutrients. Structural proteins comprising of actin, myosin, tropormyosin and actomyosin constitute 70-80 per cent of the total fish protein. In addition, sarcoplasmic proteins such as myoalbumin, globulin and enzymes and connective tissue proteins account for approximately 25-30 per cent and 3 per cent of total fish protein respectively. It is also the most affordable source of animal protein in absence of any alternative sources of protein. For some IORA countries such as Indonesia, Bangladesh and Sri Lanka the share of fish in total animal protein is 54 per cent, 56 per cent and 57 per cent respectively (FAO, 2014).

iii. Rising Coastal Tourism
Coastal tourism, a major sector of blue economy, presents huge potential for job creation and economic growth. UNEP (2009) observes that growth of coastal tourism has reached its peak in recent decades. Sea angling, bird watching, boating at sea, dolphin watching, scuba diving, swimming in the sea and other related activities around the sea are some of those emerging

segments of coastal tourism (Morrissey, Stephen, Michael & Cathal, 2010). Hotels, motels, water sport, cruise and restaurants are potential segments for expansion and growth in the coastal tourism sector.

iv. Surging of Seaborne Trade
Sea is a cost-effective and carbon friendly mode of transportation for global trade. About 90 per cent of world trade is conducted through the sea routes. International seaborne trade continued to grow at a steady rate over the past few years after a sharp contraction in activities during the global economic recession. Dry cargo accounts for more than 70 per cent of the total volume of seaborne trade in the world. These include trade in bulk commodities such as iron ore, coal, grain, bauxite, alumina, phosphate rock, containerized trade and general cargo.

v. Demand for Alternative Sources of Energy
Blue economy could be a major source of clean energy, where large renewable energy is not tapped. Resources under the blue economy initiatives can be suitably employed for development and promotion of renewable energy technologies. For instance, solar and wind in India; non-hydro renewables in Brazil, Egypt, Thailand and the Middle East; hydropower in Asian countries and others indicate the achievements in the renewable energy sector (IEA, 2015). Ocean renewable energy in the form of wave energy, solar energy, tidal energy, hydroelectric energy would reduce the burden on finite conventional sources of energy production. Government of India has set measurable targets for four key sectors of renewable energy such as wind power, solar power, biomass power and small hydro power in its Strategic Plan for New and Renewable Energy Sector 2011-17 (Government of India (2011)).

vi. Managing Coastal Urbanization
Blue economy policies seem to have more positive propositions in favor of urbanization. In specific terms, promoting coastal urbanization by subscribing to the core principles of sustainable, low-carbon and eco-friendly processes and technologies would eliminate the established fears associated with the business-as-usual approach toward city planning. There is a need to switch from production-led urbanization to tourism-led urbanization in which a city would rather serve as a space for consumption and leisure than for production (Qian, Dan & Hong 2012).

vii. Improving Ocean Health
With very little dispute, it is a fact that the oceans and the oceanic resources face the risk of extinction and secular depletion due to the rapid industrialization, unplanned and poorly governed urbanization, sea encroachments, water pollution, soil degradation, climate change and many other factors. As a result, the quality of marine biodiversity is getting eroded day-by-day without appropriate compensating mechanisms in place. It may require calibrated policy initiatives representing a mix of identification of vulnerable species, marine protected areas, ecosystem based management, effective fisheries regulations and so on (Pinsky, Kristy, Daniel, & Cheryl, 2013).

viii. Providing Marine Governance

The potential of marine resources for socio-economic development depends on the effectiveness of marine governance both at the national and the global level. It refers to the provisions, regulations and mechanisms surrounding access, management and control of oceans, ocean resources and the ocean-related activities. Marine governance is an integral component of a plethora of international and multilateral conventions on sea.

ix. Ocean Technologies
Ocean technologies converse to technologies used for renewable energy production, deep-sea mining, freshwater production from sea, offshore structural components, ocean acoustics, seabed classification, modeling of oceanic processes, ocean electronics, marine biotechnology, aquaculture, coastal and environmental engineering, among others. The potential of those technologies are immense in terms of their future contribution to energy supply, production process, drug development, seabed management, and so on.

Conclusion
Blue economy takes in an extensive array of sectors that could speak to key developmental challenges facing the coastal economies. By exploiting blue resources, the topic of poverty, food insecurity, unemployment and ecological imbalance can be effectively tackled. Research and innovations in marine biotechnology, higher access to seabed resources, investment in marine ICT and proper integration of coastal tourism and other services could play a decisive role in injecting stimulus for creating additional economic activities in the IORA region.

References
Colgan, Charles. S. (2004). *Measurement of the Ocean and Coastal Economy: Theory and Methods*. National Ocean Economics Project, USA.

European Commission (2012). *Progress of the EU's Integrated Maritime Policy.* Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions.

FAO (2014), State of World Fisheries and Aquaculture 2014, Rome.

Government of India (2011). *Strategic Plan for New and Renewable Energy Sector for the Period of 2011-17.* Ministry of New and Renewable Energy, New Delhi.

IEA (2015). *Renewable Energy: Medium Term Market Report 2015*. Paris, France: International Energy Agency.

Morrissey, Karyn., Stephen Hynes., Michael, Cuddy., & Cathal, O'Donoghue. (2010). *Ireland's Ocean Economy*, Report prepared by the Socio-Economic Marine Research Unit (SEMRU), J.E. Cairnes School of Business and Economics, National University of Ireland, Galway.

Pinsky, Malin. L., Kristy, J. Kroeker., Daniel, J. Barshis., & Cheryl, A. Logan. (2013). Marine Conservation in a Changing Climate. *Encyclopaedia of Biodiversity*, 32-44.

Qian, Junxi., Dan, Feng., & Hong Zhu. (2012). Tourism-Driven Urbanisation in China's Small Town Development: A Case Study of Zhapo Town, 1986-2003. *Habitat International, 36*(1), 152-160.

United Nations (2012). *Blue Economy Concept Paper.* (Rio de janeiro: United Nations, 2012).

UNEP (2009). *Sustainable Coastal Tourism: An Integrated Planning and Management Approach*. Priority Actions Programme, France.

Career Success of Women in Corporate Management: An Overview of Issues

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Abstract

Although there has been a significant increase in the number of women pursuing managerial careers, there seems to be a disparity in terms of advancement into the top levels of management. Global research has highlighted the contributions women make when they do attain positions of power and influence in organizations. This brings out the need to focus on the barriers women face in progressing to the higher levels of the organizational hierarchy. This research paper provides a brief overview of empirical research on issues related to the career development of women corporate managers. It discusses the suitability of women for top level management positions, barriers to their career progression in corporate organizations, and the factors contributing to their career success. It suggests that both individual and organizational strategies would be necessary to enable women managers to navigate the power structures of corporate organizations and overcome the barriers to their career progress.

Keywords

Women in corporate management, Career advancement of women, women leadership, women's career development, career success of women managers

Introduction

A confluence of changing values and economic necessity has led to a shift in the perception of requisite management structures, practices and skills to meet the demands of today's age of interdependent global enterprise. It is felt that the tendency of contemporary organizations to replace their bureaucratic formal structures emphasising chain-of-command with small teams that are more responsive to customers will result in a greater demand for women managers. The managerial characteristics that present day companies profess to value do not appear to conform to the "male model" of management. Rather, experts all over the world are claiming that the management style traditionally associated with women, which incorporates instinct, intuition, flexibility, empathy, emotional intelligence, ability to manage change, and multi-tasking skills to a greater extent than the leadership style of men, is more in tune with the needs of contemporary organizations. Against the context of this potential opportunity for women to reach positions of influence together with the observation that a relatively minute percentage of the powerful positions in the corporate world are actually occupied by women, it was felt appropriate to investigate the issues facing women as they strive to advance to the highest levels of management.

This research paper provides a brief overview of empirical research on issues related to the career development of women corporate managers. It discusses the suitability of women for top level management positions, barriers to their career progression in corporate organizations, and the factors contributing to their career success.

Women as Managerial leaders

Research studies which highlight the suitability of women for leadership roles in the contemporary world of management suggest the need for a more proactive approach to the issue of career advancement of women to high level managerial positions.

Alimo-Metcalfe(1995) points to growing evidence that the modern style of leadership required for organizations, which embodies vision, individual consideration, strengthening of individual's involvement in decision making, and nurturance of growth and self-esteem, is more likely to be found in women. Women are seen to bring with them the qualities of warmth, consideration for others, nurturance of self-esteem and integrity.

Grant (1988) suggests that women managers contribute in particular in the following important ways: communication and co-operation, affiliation and attachment, power and intimacy and nurturance. She argues that the practice women have from an early age in caring for others makes them more adept at facilitating co-operative behaviour, consultation, and democratic decision-making.

According to Bates (1988), women understand power as becoming powerful not only to accomplish one's own goals but also spreading power to help others accomplish their goals as well.

Astin and Leland's (1991) cross-generational study of social change involving 77 women leaders found that women demonstrated a leadership style based on empowerment and collective action to initiate and sustain change. The study suggested that women possess more flexibility, intuition, and a greater ability to be empathetic and create a more productive work climate. They were able to exercise power in a more constructive way, mobilize human resources better, encourage creativity, and change the hierarchical structures.

Rosener (1990) conducted a survey of prominent global women leaders which revealed that women leaders encourage subordinates to transform their self-interest to correspond with organizational goals and interests. This approach is referred to as 'transformational leadership', which has been found to relate strongly to organisational morale, team cohesion, commitment, and team and organisational measures of success (Bass & Avolio, 1992).

In a study of the issues facing women managers in corporate India, Gupta, Koshal, and Koshal (2006) found that women are more relationship oriented, pay more attention to processes and how tasks are done while focusing on outcomes, support innovation and change and like to build consensus to a greater degree than men.

Research studies on women's attitude to leadership suggest that women are transforming the different arenas by building a new social order or paradigm that will eventually replace the old order.

Barriers to Career Advancement of Women managers

The above review of the studies highlighting the special contribution that women bring to organizations highlights the need to focus on the barriers women face in progressing through the organizational hierarchy. Here, an attempt is made to present a brief summary of the research findings regarding the factors inhibiting the advancement of women into the senior ranks of management.

The Glass Ceiling

In the race towards higher level managerial positions, women face barriers that are not faced by their male counterparts. They are confronted by a "glass ceiling" which is a barrier so subtle that it is transparent, yet so strong that it prevents women from moving up the managerial hierarchy (Morrison and Von Glinow, 1990). Schwartz (1989) considers the "glass ceiling" as comprising the barriers women face in progressing to senior management positions when layers of influence such as maternity, tradition and socialization, meet management strata pervaded by the largely unconscious preconceptions, stereotypes and expectations of men.

A significant barrier which women in management face is the pressure resulting from **work-family conflict**. Despite the increased involvement of women in the workforce, research over time and across cultures continues to document the persistence of inequality in the allocation of household work and family responsibilities, even among couples with modern ideologies and in countries with commitment to gender equality at home and at work.

Women's extra responsibilities on the domestic front create role conflict and overload, thereby reducing potential for career achievement. Pittman and Orthner (1988) found that women who experience extensive role conflict from their career and family roles may reduce their level of career involvement or curtail their time commitment to their jobs in an effort to alleviate the conflict. Such an attitude on the part of women might negatively impact the career opportunities made available to them and their career achievements, thus reducing their prospects for upward mobility. Thus, the cultural norms that define a woman's familial and career roles can act as an obstacle to women's career advancement.

Differential developmental opportunities

Many studies point at differential treatment of male and female employees in terms of qualifying assignments as a crucial factor in the processes disadvantaging women. Women are frequently found to be assigned job responsibilities and assignments that yield lower developmental opportunities, thereby reducing their promotion potential. They are rarely considered for highly visible, risky or challenging assignments. Prevailing stereotypes of women managers as disinterested in challenge have resulted in the situation that women must identify and explicitly ask for challenging assignments whereas equivalent high-potential men would have such assignments offered to them as a matter of course. (Ragins, Townsend and Mattis, 1998).

Lewis and Cooper (1988) also observed that owing to the assumption that women will subordinate their careers to their family responsibilities, organizations are unlikely to invest in the development of their women managers in the form of training, sponsorship and assignment to jobs that provide power and opportunity.

Lack of centrality- a barrier to career advancement

According to White, Cox and Cooper (1992), women may disadvantage themselves with regard to career advancement by making career choices which do not generally lead to senior managerial positions. Organizations also tend to place women in jobs which have poor promotional prospects, or in functional areas which are not considered central to the functioning of the business. Their concentration in support functions leads to the assumption that they do not possess the business knowledge or exposure which is needed for handling senior management positions.

Antecedents of Career success for women managers.

According to Cox and Cooper (1988), the key ingredients to a successful managerial career are:

- Wide early experience covering a range of functions and ideally, a range of different types of companies.
- Acceptance of challenging, risky, and visible assignments.
- Being ready and willing to utilise opportunities as and when they arise.

The findings of this study on career success revealed that a common attribute of successful managers was the inclusion of a wide breadth of experience in their managerial careers, involving many functions and often exposure to a range of product types.

Morrison, White and Van Velsor (1987) in a three-year study of top female executives identified six factors which contributed to success of women managers. These were help from above, a

track record of achievements, desire to succeed, ability to manage subordinates, willingness to take career risks, and the ability to be tough, decisive and demanding. Four critical work experiences identified by this study were a feeling of being accepted by the organization, receiving support and encouragement, being given training and developmental opportunities and being offered challenging work and visible assignments.

White, Cox and Cooper's (1992) study of high-flying women found that the women were motivated by the intrinsic desire to excel at their work and placed higher value on challenging and interesting work than on promotional avenues. These women had been successful in managing their lives to accommodate the demands of largely "male" career routes. They had been able to adapt to a schedule which necessitated working long hours, acquiring the necessary breadth of work experience including key functions such as finance and business management. They had also been successful in managing the gender and power structures in their organisations to achieve their goals. These included the use of mentors and sponsors, networking and alliances and a high degree of skill and accuracy in understanding the political processes in operation in their organizations.

According to Palmer (1996), career success of women managers could be linked to their own level of motivation and commitment to their work and their desire to retain and develop a part of their lives which they found challenging and interesting. Three important aspects of personal motivation were cited as (1) confidence in own ability, (2) a desire to contribute and be recognised for it and (3) career commitment. This study also identified the three main areas in which women acted strategically to advance their careers were (1) getting the right career profile, (2) proper planning in the realms of family and career, and (3) dealing with the "macho" culture and harassment.

Socialization patterns and career success

According to Gustafson and Magnusson (1991), two main precursors of adult career achievement for females were parental values and an overall pattern of career involvement. The highest adult achievers in this study were females who had an accurate perception of their own high ability, and came from families in which the parents placed a high value on educational achievement, believed in their daughters' capability and had high aspirations for her education and career. A consistent configuration of high academic aspirations, self confidence, high adaptation to academic demands and high aspiration to complete education required for high-level jobs appears to constitute a pre-requisite for high career achievement.

According to White et al. (1992), career success of women managers appears to be associated with a parent-child relationship where the parents were supportive of the achievements of their daughters and encouraged autonomy of decision-making. Patterns of parent-child relationship observed among the successful women helped develop a high need for achievement, strong sense of competence and self-confidence. The successful women in this study claimed that their families had an ethos of equity, independence, high standards, and a belief that one could do anything that one chose to do.

Parasuraman and Greenhaus (1993) propose that spousal support for women's career aspirations is a significant factor contributing to career success of managerial women. Their research reveals various ways in which husbands' attitude and behaviour can have substantial positive effects in enabling women to balance their career and family roles effectively and make progress in their careers. Husbands can play a supportive role by restructuring their own jobs to participate more

extensively in family activities, sharing the workload at home, participating in a commuter marriage and being supportive of their wives' career aspirations.

Organizational initiatives for facilitating career success

According to Burke and Nelson (2002), reduction in societal norms of male superiority and patriarchy together with a change in stereotypes of effective management which challenges the perception of management being a male domain and emphasises traditionally female characteristics will have a positive influence on the proportion of women in top management positions.

Catalyst (1998) has identified characteristics of successful organizational change initiatives as:

- Motivation and rationale linked to business strategy and profitability.
- Support from the highest levels of the organization.
- Built-in communication plan showing the linkage between "best practices for advancing women executives" and business issues.
- Built–in accountability mechanism for successful implementation of the initiative.

Conclusion

Although the relative failure of women to move into the ranks of senior management is a worldwide phenomenon, they are found to be making significant contributions to organizations, whenever they have been provided with the opportunity to occupy powerful and visible managerial positions. This highlights the need for both individual women and corporate organizations adopting a more proactive stance towards the issue of women's career advancement and career success.The research findings suggest that it is the timely interaction between individual and organizational strategies that would help women to effectively navigate the power structures of corporate organizations and break down the barriers to their career progress.

References

Alimo-Metcalfe, B. (1995). 'Leadership and Assessment'. In Vinnicombe, S. & Colwill, N. L.(Eds.) *The Essence of Women in Management*, pp. 92-109. London: Prentice Hall.

Astin, H. S. & Leland, C. (1991). *Women of Influence, Women of Vision: A Cross-Generational Study of Leaders and Social Change*, p. 157. San Francisco: Jossey Bass Publishers.

Bass, B. M. & Avolio, B. J. (1992). *'Shatter the glass ceiling: women make better managers',* Report 92-1, The Center for Creative Leadership, p. 19.

Bates, B. (1988). *Communication and the Sexes*, p.39, p.380. New York: Harper and Row.

Burke, R. J., & Nelson, D. L. (2002). Advancing Women in Management: Progress and Prospects. In R. J. Burke & D. L. Nelson (Eds.), *Advancing Women's Careers: Research and Practice*, pp.3-14. Oxford: Blackwell.

Catalyst (1998). *Advancing Women in Business: The Catalyst Guide*. San Francisco, CA: Jossey-Bass

Cox, C., & Cooper, C.L. (1988). *High Flyers*. Oxford: Basil Blackwell.

Grant, J. (1988). 'Women as managers: What they can offer to organizations'. *Organizational Dynamics*, 16(1), 56-63.

Gupta, A., Koshal, M., & Koshal, R. K. (2006). 'Women managers in India: Challenges and Opportunities', in H. J. Davis, S.R. Chatterjee & M.Heuer (Eds.) *Management in India: Trends and Transition*. New Delhi: Response Books. pp. 285-312.

Gustafson, S. B. & Magnusson, D. (1991). *Female Life Careers: A Pattern Approach.* New Jersey: Lawrence Eilkeum Associates, Inc., Publishers.

Lewis, S. N. C., & Cooper, C.L. (1988). Stress in dual-career families. In B. A. Gutek, A. H. Stromberg, & L. Larwood (Eds.), *Women and Work : An Annual Review*, pp. 139-168. Newbury Park, CA: Sage.

Linehan, M (2000). *Senior Female International Managers-Why So Few*? Aldershot: Ashgate.

Morrison, A. M & Von Glinow, M. A. (1990). 'Women and minorities in management'. *American Psychologist*, vol. 45, no. 2, p. 200.

Morrison, A. M., White, R. P., & Van Velsor, E. (1987). *Breaking the Glass Ceiling: Can Women Reach the Top of America's Largest Corporations?* Reading, MA: Addison- Wesley.

Palmer, A. (1996). Something to declare: Women in HM Customs and Excise. In S. Ledwith & F. Colgan (Eds.) *Women in Organisations: Challenging Gender Politics,* pp.125-151. London: Macmillan.

Parasuraman,S. & Greenhaus, J.H. (1993). Personal Portrait: The Life-Style of the Woman Manager. In E.A. Fagenson (Eds.) *Women in Management: Trends, Issues and Challenges in Managerial Diversity*, pp. 186-211. Newbury Park: Sage.

Pittman, J. F., & Orthner, D. K. (1988). 'Gender differences in the prediction of job commitment'. *Journal of Social Behaviour and Personality*, 2, 227-228.

Ragins, B. R., Townsend, B., & Mattis, M. (1998). 'Gender gap in the executive suite: CEOS and female executives report on breaking the glass ceiling'. *Academy of Management Executive,* 12(1), 28-42.

Rosener, J. (1990, November-December). 'Ways women lead'. *Harvard Business Review*, 119-125.

Schwartz, F. N. (1989). 'Management women and the facts of life'. *Harvard Business Review,* vol. 67, no. 1, p. 68.

White, B., Cox, C., & Cooper, C. (1992). *Women's Career Development: A Study of High Flyers*. Oxford: Blackwell.

Green BuildingKnowledge Dissemination: A study among the Architects in Kerala

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Abstract
Green Building Knowledge Dissemination is very much essential for the diffusion of green buildings in the construction sector. Information is vital in molding any professionals approach towards greenness. Proper communication channels and information dissemination is of crucial importance to achieve sustainability in the built environment as construction of green buildings requires integrated set of activities. Hence, the present study tries to understand the familiarity towards green building of one of the major stakeholders of green buildings i.e., Architects; by analyzing their source of green building knowledge. Percentage analysis, one sample t test, independent sample t test and ANOVA are used to analyze the Architects profile and how they learned about green building. Gender- age- experience effect on the nature and source of information acquired by them are also analyzed. This study can help academicians and policy makers in creating effective platforms for information dissemination.
Keywords: *Sustainability, Green Building, Green Building Knowledge, Architects.*

1. Introduction

Green Building practices are primarily concerned with reducing the environmental degradation and unpleasant impacts associated with construction. The need for green buildings in the construction sector has become very significant in the recent decade mostly because of the major resource consumption and contamination which buildings create. Green Buildings are important to ensure sustainability in construction sector. All the major stakeholders of construction industry should join hands together in the attempt to make the built environment green and sustainable. The dissemination of Green Building knowledge and adaptation of Green Building technologies are being hindered because of lack of understanding of green building concepts among the stakeholders. So, awareness of green building is essential among the stakeholders of the construction industry to contribute to the betterment of the built environment.

2. Review of Literature

Major stakeholders of the construction industry especially developers and architects should have in-depth understanding about the concept of sustainability and green building construction knowledge. Information, Promotion and Education Barriers are found to be the major downsides for green building infusion. These barriers emerge internally due to information asymmetry, lack of knowledge and expertise in life cycle costing of building and so on. The green building sector has a lot of asymmetric information on technical and managerial perspectives and it impacts different firms and stakeholders in their choice to invest. The unbalanced data relates to issues like buildings Act, energy efficiency, wastage, energy labels etc. (Abraham &Gundimeda, 2017). This limitation of knowledge refers to the lack of comprehension about the concept of Green Building used by all the stakeholders like owners, construction managers, architects, builders, engineers and occupants who can incorporate green building concepts into a building life cycle.

The significance of green building knowledge centers around three main viewpoints: the advantage of green buildings, understanding about existing green advancements, and comprehension of how to utilize Green Building technology properly and productively (Zhang Y, et al., 2019). Ahn& Pearce (2007) emphasized that most popular methods of getting green building information and skills by the construction-related industry are by sending their workers to sustainability related conferences and by reading green building magazines. They also added that Universities should teach green building rating systems and other related aspects of sustainability and green building process and products to familiarize construction related students with green building.Berawi et al. (2019) asserted that to accelerate green building implementation, the government should play a pivotal role. They professed that in order to improve the current status of green building, it is imperative that the concepts of green building and its components should be promoted through socialization, workshop and knowledge sharing. Usman &Khamidi (2012) noted that the communication and education strategy is very important in making the stakeholders understand about sustainability issues and green building concepts. Also, NGO's, mass media, scientific community and policy creators must function unitedly in order to create awareness among the general public as well. Potbhare et al. (2009) stated that availability of better information on cost and benefits of green building guidelines can trigger green building adoption. An informed approach should be followed to create awareness through variety of information sources such as internet, print media, newspapers, workshops and seminars, courses and books etc.

3. Significance of the study

Green Building Knowledge Dissemination is very much essential for the diffusion of green buildings in the construction sector. Green building knowledge background can ideally help Architects to spearhead a more sustainable building culture. This paper is an attempt to know how green building knowledge is infused in the Architect community, whether conscious effort has been made by them to gain a good background in green building. This paper aims to evaluate architect's knowledge of green building from various sources.

4. Methodology

The researcher followed a descriptive approach in conducting the study. Data was collected from 40 Architects registered in the Council of Architecture from Kerala. Purposive Sampling method was used to select architects using the Architects Directory and asking their interest in Green Building concepts, since many architects were not given due concern to the Green Building concept.The collected data was analyzed using Percentage Analysis, One sample t test, Independent sample t test and ANOVA.

The **main objective** of the study is to explore how Architects learned about green buildings and to what extent, Architects relied on various sources of information to gain knowledge about green building practices and techniques. The **second objective** is to analyze the effect of age gender and experience on the sources of green building information. Three Hypotheses were formulated based on this objective for the study which are as follows:

- H1: There is no significant difference in the level of green building information from various sources as far as gender of the respondent is considered.
- H2: There is no significant difference in the level of green building information from various sources as far as age of the respondent is considered.
- H3: There is no significant difference in the level of green building information from various sources as far as experience of the respondent is considered.

5. Results and Discussion

Data for the study was collected from Architects working in different parts of the state in Kerala. Profile of the Architects based on gender, age and experience is discussed in this section. Percentage Analysis was done.

Respondents Profile:

Table 1:Gender wise distribution of the respondents

Gender	Number	Percentage
Male	23	57.5
Female	17	42.5
Total	**40**	**100.0**

Source: Primary data

Table 1 shows the Gender wise distribution of the respondents. Out of 40 respondents, 57.5 percent of the respondents are male architects and 42.5 percent are female architects.

Table 2: Age wise distribution of the respondents

Age	Number	Percentage
Up to 30	17	42.5
30 – 40	14	35.0
Above 40	9	22.5
Total	**40**	**100.0**

Source: Primary Data

Table 2 depicts the Age wise distribution of the respondents. It was noted that 42.5 percent of the respondents are in the age group of up to 30 years. 35 percent belonged to the age group of 30 to 40 years. And the remaining 9 percent are in the above 40 age group.

Table 3: Experience wise distribution of the respondents

Experience	Number	Percentage
Upto 5 years	15	37.5
6 – 15	14	35.0
Above 15	11	27.5
Total	**40**	**100.0**

Source: Primary Data

Table 3 illustrated the Experience wise distribution of the respondents. 37.5 percent architects had the work experience of up to 5 years. 35 percent architects had 6-15 years of experience and 27.5 architects had experience of more than 15 years.

Architects Level of Information from Various Sources:

Green Building information can be disseminated to the Architect Community from several sources. The study analyses the various sources of information that provides green building knowledge and education to the Architects.

Table 4: Architects Level of Green Building Knowledge from Various Sources

Variables	Mean	SD	t-value	p-value
During the course of Architecture Education	2.1250	.60712	1.302	.200
Read about it in articles and books	2.6500	.57957	7.093	.000
From a colleague/supervisor	2.2000	.68687	1.842	.073

Attending Green Building Conference and Events	2.1750	.71208	1.554	.128
Internet /Websites	2.5750	.54948	6.618	.000
Professional membership associations	1.9500	.87560	-.361	.720
Independent research studies	2.2250	.80024	1.778	.083
Green Certification Agency	1.6750	.72986	-2.816	.008
Government Rating Schemes	1.4750	.67889	-4.891	.000
Professional magazines or newsletters	2.3250	.57233	3.591	.001
Taking courses about green buildings	1.8250	.87376	-1.267	.213

Source: Primary Data

Table 4 presents the mean score values obtained for the extent of green building knowledge gained from various sources of information using One sample t-test. Test value is 2.

The results indicate that the mean score is greater than the test value 2 in case of source of information reading about green building in articles and books (Mean = 2.650, SD=0.579 and p value=0.000), Internet/ Websites (Mean = 2.5750, SD=0.549 and p value=0.000) and Professional magazines or newsletters (Mean =2.3250, SD= 0.572 and p value=0.001). Calculated P value for all these sources was found to be less than 0.05. Hence the level of information from these sources are significantly very high.

The results shows that mean score is greater than test value 2 for information obtained during the course of Architecture education (Mean =2.125, SD= 0.607 and p value=0.200), from colleague/supervisor (Mean = 2.200, SD=0.686 and p value= 0.073), attending green building conference & events (Mean = 2.1750, SD=0.712 and p value=0.128) and Independent research studies (Mean =2.2250, SD=0.800 and p value=0.083). The calculated p value for all these sources is found to be greater than 0.05. Hence the level of information from these sources is also comparatively high.

The mean score for information is less than the test value 2 for information from Professional membership associations (Mean = 1.950, SD=0.875 and p value=0.720) and taking courses about green buildings (Mean = 1.825, SD=0.873 and p value=0.213). Calculated t value is found to be negative. Calculated P value is greater than 0.05. Hence the information obtained from these sources is found to be comparatively low.

The mean score for information is less than the table value 2 for information from Green Certification Agency (Mean =1.675, SD=0.729 and p value=0.008) and Government rating schemes (Mean = 1.475, SD=0.678 and p value=0.000). Calculated t value is found to be negative and calculated P value is less than 0.05. Hence the information obtained from these is significantly very low. Least information is obtained from these sources.

Comparison of Level of Information from various sources based on gender, age and experience:
The **hypotheses** were tested using Independent sample t test and ANOVA and are shown in table below:
- H1: There is no significant difference in the level of green building information from various sources as far as gender of the respondent is considered.

Independent sample t-test was applied to compare the significance of difference between male and female architects regarding the level of information from various sources and the results are presented in Table 5.

Table 5: Comparison between male and female

Gender	Number	Mean	SD	t-value	p-value
Male	23	23.2174	4.18826		
Female	17	23.1765	2.67477	.035	.972

Source: Primary Data

Table 5 reveals that the mean score obtained for green building information from various sources for male is 23.217 with standard deviation 4.188 and that of female is 23.176 with standard deviation 2.674. The p value (0.972) is found to be greater than the value 0.05 and calculated t value (0.035) is less than 2.02. There is no significant difference in the mean score of information from various sources based on gender. Hence the null hypothesis "There is no significant difference in the level of green building information from various sources as far as gender of the respondent is considered" is accepted.

- H2: There is no significant difference in the level of green building information from various sources as far as age of the respondent is considered.

Analysis of Variance was applied to compare the significance of difference among different age groups regarding the level of information from various sources and the results are presented in Table 6.

Table 6: Comparison based on age

Age	Number	Mean	SD	F-value	p-value
Upto 30	17	23.8824	2.80362		
30 – 40	14	23.2857	3.66750	1.023	.369
Above 40	9	21.7778	4.65773		
Total	40	23.2000	3.58201		

Source: Primary Data

Table 6 illustrates the mean score obtained for green building information from various sources for different age groups. Mean score for age group up to 30 years is 23.882 with standard deviation 2.803, for 30-40 years mean score is 23.285 with standard deviation 3.667 and that of above 40 age group is 21.778 with standard deviation 4.657.Calculated F value 1.023 less than the table value 3.23. P value (0.369) is greater than 0.05. There exists no significant difference in the mean score of information among different age group in the green building information gained. Hence the null hypothesis "There is no significant difference in the level of green building information from various sources as far as age of the respondent is considered" is accepted.

- H3: There is no significant difference in the level of green building information from various sources as far as experience of the respondent is considered.

Analysis of Variance was applied to compare the significance of difference among respondents based on work experience regarding the level of information from various sources and the results are presented in Table 7.

Table 7: Comparison based on experience

Experience	Number	Mean	SD	F-value	p-value
Upto 5 years	15	23.7333	2.96327		
6 – 15	14	22.9286	3.26907	.259	.773
Above 15	11	22.8182	4.81286		
Total	40	23.2000	3.58201		

Source Primary Data

Table 7 presents the Experience wise mean score of the respondents. Mean score for work experience up to 5 years is 23.733 with standard deviation 2.963, mean score for 6-15 years of experience is 22.928 with standard deviation 3.269 and that of above 15 years work experience is 22.818 with standard deviation 4.812. Calculated F value 0.259 less than the table value 3.23. P value (0.773) is greater than 0.05. There is no significant difference in the mean score of information from various sources based on years of experience. Hence the null hypothesis "There is no significant difference in the level of green building information from various sources as far as experience of the respondent is considered" is accepted.

6. Findings & Conclusion

The paper investigated the level of information and the various source of information of green building among the architect professionals in the state of Kerala in India. From the above discussion we can conclude that high extent of information was gained mainly through reading about green building in articles and books, Internet/ Websites and Professional magazines or newsletters. This shows that the architects made a conscious effort to know about green building concepts and it is a very good indicator. The level of information obtained from Green Certification Agency and Government rating schemes were significantly very low. This stresses on the need for Government to take necessary steps to popularize green certifications and green ratings because it could lead to rapid adoption of green buildings. Effective communication and education strategies should be implemented by the Government to impart green building guidelines through agencies and rating schemes. The study also found that there exist no significant difference in the variables- age, gender and experience regarding information gained from various sources. The study concludes that the architect professionals in Kerala have awareness in green building concepts gathered from various sources. If this awareness could lead to action, it could boost the social, economic and environmental wellness of the built environment. Architects should also share this information with all the other stakeholders and express this knowledge in their professional practice.

References

Abraham, P. S., &Gundimeda, H. (2017). 'Greening' the Buildings-An Analysis of Barriers to Adoption in India. *Cities and the Environment (CATE)*, *10*(1), 10.

Ahn, Y. H., & Pearce, A. R. (2007). Green construction: Contractor experiences, expectations, and perceptions. *Journal of Green Building*, *2*(3), 106-122.

Berawi, M. A., Miraj, P., Windrayani, R., &Berawi, A. R. B. (2019). Stakeholders' perspectives on green building rating: A case study in Indonesia. *Heliyon*, *5*(3), e01328.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. sage.

Potbhare, V., Syal, M., & Korkmaz, S. (2009). Adoption of green building guidelines in developing countries based on US and India experiences. *Journal of Green Building*, *4*(2), 158-174.

Usman, A. U., &Khamidi, M. F. (2012). Determined the level of green building public awareness: application and strategies.

Zhang, Y., Wang, H., Gao, W., Wang, F., Zhou, N., Kammen, D. M., & Ying, X. (2019). A Survey of the Status and Challenges of Green Building Development in Various Countries. Sustainability, 11(19), 5385.