

How Innovation Process and Digital Innovation Influences in IT Organizaton

***J. Jayanthi **Dr. S. Sudha**

*(Corresponding Author), Research Scholar, Department of management, VISTAS, Pallavaram.

**Professor, Department of management, VISTAS, Pallavaram,

Article History: Received: 11 January 2021; Revised: 12 February 2021; Accepted: 27 March 2021; Published online: 10 May 2021

Abstract:

Purpose of this paper is to study the influence of innovation's in Indian IT Industry, review the literature on the effect, impact of the innovation in service organization and to develop a conceptual framework of the factors involved in the organization and business model innovation. The author reviewed the various literatures related to the innovation, how it is impact, influence and effect the organization and industry. The researcher develops the conceptual framework and business model of the innovation. The most recent studies investigated the how innovation relationship with TQM and service organization. The study examines the impact of innovations in IT organization, business model innovation on it and conceptual framework on innovation are proposed. Innovation in IT organization is to finding the creativity ways to provide value to the client. Innovation is an essential service in all IT organization due to high and tough competition in the world. Each and every organization, to deliver a new innovation to the world for competitive environment, otherwise it is difficult to keep on the world. A comprehensive review of literature on effect and influence of Innovation was carried out to accomplish the objectives of this study. The conceptual model framework would help the manager, decision makers and client's to select the innovative ideas and also provide the flow of innovation process and how innovation's implemented in the IT organization. The Business Model Innovation describes the rationale of how an organization creates, delivers, and captures value of innovation idea's.

Keywords: Innovation; Conceptual framework and Business Model Innovation.

Introduction:

In India, two major components are involved to develop the Information Technology(IT) industry. 1. IT services and 2. Business Process Outsourcing(BPO). IT Services and BPO is the largest contributor to total revenue of the country. The IT industry is not for development of software alone; it includes the technologies applied in Bank, shops, prisons, hotels, airport, government office and many other places through database management system or custom made software as seen fit.

Importance of the IT industry is significantly increasing in international and local economics. IT industry workforce is becoming increasingly diverse- in terms of socio-economic, linguistic, multinational and regional backgrounds. During the last two decades' contribution of the Indian IT industry revenues is estimated at around US\$ 154 billion in FY 2017-18 and is estimated to be at US\$ 181 billion in FY 2018-19. See figure 1

India is the leading sourcing destination across the world, accounting for approximately 55 per cent market share of the US\$ 185-190 billion global services sourcing business in 2017-18. All over world, Indian IT industry have a one hundred global delivery centers in about 80 countries. 75 percent of digital capabilities hub of the world is present in India. In the year 2025, the India has expected to IT industry revenue increased from US\$ 181 billion in 2018-19 to US\$137 billion.

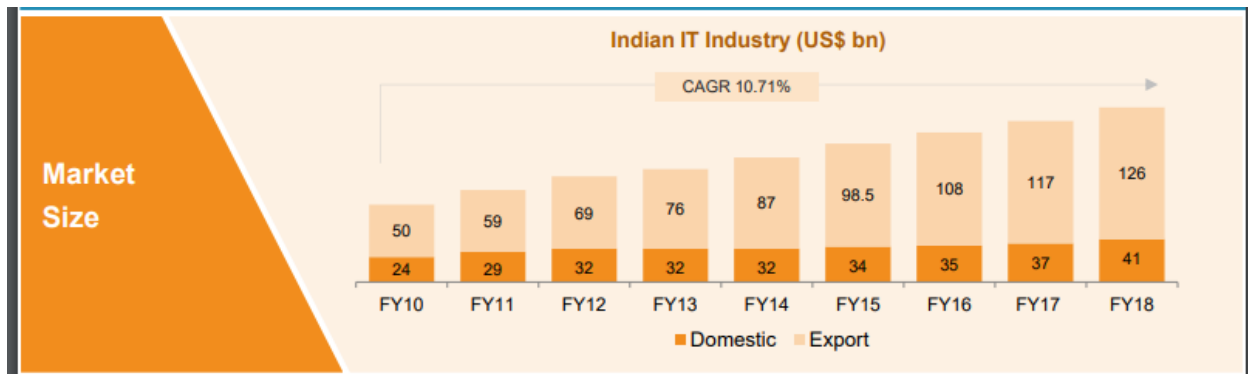


Fig 1: Revenue in Indian IT industry.
Source: India Brand Equity Foundation

In FY2020, the IT industry revenue has growth to 7.7% from last year and it reached the 191US\$. The most important key imperatives of the IT industry are Innovation, Talent (latest technology upgradation) and commitment, based on these imperatives Indian IT industries are continuously growth and revenue. One of the key imperatives(Innovation) has taken for this research paper and writes its influence in Indian IT industry.

Innovation:

Innovation becoming more democratic, many new ideas and creatives and even solutions do not come from deep-pocket companies or government experimental institutes only. Innovation can come from everyone and everywhere. As the organization normally do not have dedicated R&D departments, the innovation organization is often a project team with members from various functions. They are in charge of innovation ideation and drawing the blueprint. When the innovation project has been carried out or integrated into the normal business process in the organization. Innovation at Indian IT industry has implemented for different motivation and aims. Innovation is all about discover the new innovative methods with latest technology to provides the ideals solution to the customer. Organization have good business reasons for taking a spark of innovative into a new customer solution. Innovation will happen when the growth of high digital technology and competition increased in IT industry. So IT industry has to provide the cheaper and faster services, then only it can be retained in the market with longer profit. Innovation will discover a brand new technology to work on a new challenge, new spin on the existing problem and help the employ to well-worn method in a new way. Innovation is happening on all the project/product in the IT services. To succeed in an ever-changing business world, organization must innovate and their survival depends on it. Leaders play a pivotal role by developing and supporting a culture that is open to innovative thinking. As a strategic business process, innovation solves customer problem or challenges in new or novel ways. It also creates value for customers and makes companies competitive and relevant in their markets. Innovation can happen in any area or level of an organization. Innovation translates a creative idea into something that creates value whether it's a process, product or services. Innovation is creativity brought to life in the service of solving tangible problems. To be successful at innovation, teams need to come up with ideas that solve problems and add value for the customers. Ideas can be a new solution that transforms, extends or converts an existing solution.

Innovation is also helps the employee and provide the unique platform to promote and identify the individual performance. With help of innovation in organization, the employees are to become to best leader and innovator. Based on an employee encouragement in the organization, they come up with more new to with further new ideas and increase the chance for extra innovation ideas. The Outline of the innovation has differed from each IT Services. Innovation's ideas have formed in IT services in a form of Business Theme, Tech Theme and Society Theme (Fig 2).

Business Innovation, all business innovative ideas are project oriented in cooperation with client, with equal co-investments and a shorter timeframe. Focus lies on practical results and business relevance. Business teams need to better understand our customers, then only develops useful innovation to meet and anticipate their needs. To be successful at business innovation, teams need to come up with ideas that solve problems and add value for customers. Ideas can be design and its powerful way to come up with successful innovations. Innovative ideas which helps a own value and growth for improving their product and services. Innovation ideas include a) enhancement

and adding the new functionality in business process is effectively increased values to customers in the market. b) Improves the business methods in industry are used to raise the demand in Indian IT Industry. c) Latest systems are used to satisfy the customer requirement is to improve the business efficiency in IT organization, d) A new Business requirement/functionality is to establish the new firm collaboration and interactions to the client and e) innovative ideas provides standards for the customer. For example, Digitizing transforms i.e. transforming the manual document into the electronic documents with more intuitive and innovative.

Technology Innovation includes the new and enhancing the existing product and process of IT services. It provides an actual impact to the future half decades. Technical improvements are an important part of a modern society, but particularly important in the business world. The success of business operations can affected the technical operations working. Innovative ideas include a) Developing the new product and service; it satisfies the customer needs based on the consumer demands. b) Create new technologies, its moves the customer requirement in to the next level and c) to empower the business to extend the range or value of existing product or services. For ex., 3D mapping table uses virtual reality to help clients visualize their facilities in real time and make better decisions. Technology innovation refers to innovations in service-supporting technologies, such as the "face-scan and pay" feature launched by Zhifubao, Touch ID of Huawei Mate8 smart phone, online booking and seat-selection services launched by cinema chains, etc.

Basic six technology areas are innovated compulsory in IT organization: 1. digital transformation, 2. payments, 3. cloud & cloud enablement, 4. cyber, 5. internet of things and 6. business intelligence.

- **Cyber Security** is recognized as a significant risk to public and private sector organizations that rely on the Internet and IT systems to operate
- **Internet of Things** is creating an high connectivity occurring with many consumer goods every day, business properties and smart devices are becoming capable of communicating; generating a demand to harvest the data and enabling it to be used not just by business but also for innovative consumer services
- **Business Intelligence/Big Data** has become critical to any organizations survival to deliver the analytics that will deliver insights to our customer's decision makers
- **Digital Transformation** supports our clients as they move their engagement with customers and consumers from traditional post, phone and face-to-face interaction to more efficient, effective and richer engagement online and through automated processing
- **Payments** services are becoming less profitable with increasing constraints from new regulations, low interest rates, steep operational costs, outdated legacy systems, and too many manual processes
- **Cloud** solutions free the developer/innovator from resource limits by giving you the rule to design, delivery and scale the application and infrastructure of organization business needs change in a highly flexible, robust and secure environment.

Society Innovation includes an innovative ideas which helpful the society to improve the environment position and individual person status of the society. Service innovation can give birth to new knowledge or information. It has become the backbone of global economy development and a driving force for the integration of the global economy. More and more enterprises in the service industry have been undergoing service innovation to improve service production and product quality, reduce enterprise cost and develop new service concepts. Service innovations are changes of service elements in enterprises to improve service quality and create new market value. It's a dynamic process that changes the service system with purpose and organization. Innovative ideas include a) To helps a motivate people in the society on directly/indirectly and b) Create an application with new technology, is to improve the work skill of the people. For example, create a Digital Library/Technology training for Visually Impaired. Generally, society innovation does not need to conduct scientific knowledge studies or data collection, so it takes less time to development and implement.

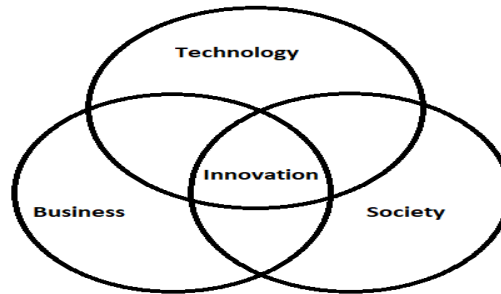


Fig2(Author own model): Themes of Innovation Idea

Literature Review:

There are extensive form of literature identifies the innovations, how it is relationship between the total quality management and its factor are used to manage the innovation in organization. A number of authors are recognized the importance of innovation, identifies different form of innovation across the different countries in different environment.

Timira Shukla 2015, point out the factors which are impact the organizations to manage innovation and its provide a details about strong correlation between factors. Motivation to innovate and organizational support are more important factor which are used to creating and implement the innovation in organization.

From author literature, the organization can know and how the factors are influence their innovation. All these factor are depending on each other and interrelated.

Yongan Zhang 2019, assert that management and technology innovation increase a performance with help of mediation role of sustainability in an organization. Also describes the relationship between sustainability and financial performance in the organization. Technology innovation is more critical for organization sustainability but high performance as compared to Management Innovation. Management give a more attention to the management innovation and configure innovation in various department in organization. Author recommends to organization to focus on both type of innovation to increase the organization performance.

Abdul Talilb Bob 2012, describes conceptual relationship between a quality management and innovation in organization. Also provides the type of innovation and how it incorporated into process or production in the organization. Author finding also shows the innovation is subjected to the organization innovativeness and innovative culture. And they conclude the total quality management and innovation relationship increase the performance and market status in the organization.

Faruk Kalay 2016, describes the effect of organizational structure, formalization and centralization on management innovation. Research can have conducted with top manager on public organization in Turkey. Based on the data retrieved and analyzed, centralization affects management innovation significantly and negatively. Also found that formalization does not have a significant impact on management innovation.

Sarminah Samad 2012, assert that relationship between innovation, transformational leadership and organizational performance. Also describes factors which influence performance in the organization. Author revealed that transformational leadership of product or service in innovation is the most important factor influence the organization performance based on the correlation matrix and multiple regression analysis result. Transformational leadership has positive and significant result on performance of the organization.

Guangfei Changli Fenga 2020, analyses and classifies the factors influence on service innovation based on the ecosystems used in manufacturing enterprises and its analysis through an existing service innovation, decision making trial and evaluation laboratory method. The results describe the customer participation, senior management support, market strategy, information technology contribution, employee contribution and knowledge sharing are the factors on innovation. Author states factor helps manager to achieve service innovation on correct path.

Anu P.Anil, 2014, states the conceptual frame work of TQM and research model of TQM implementation for performance of the organization in Indian environment. The model and framework will help to provide a gap between TQM practices and performance of the organization. It provides the detailed structure of TQM practices will help to decide the relationship between TQM and performance of the organization. Finally, author provides a

signification contribution in developing a TQM and understanding the TQM practices and organization performance in Indian environment. Author will help managers, decision makers and practitioner of organization to understand the TQM practices and how it will implement in organization.

Marisa Smit 2008, describes the factor that impact the ability of organization. It involves the technology, corporate strategy, organization structure, employees, resources, manage innovation, leadership, management style and the innovation process. Management of innovation is a key factor of organizational culture and it is impact the other factor changes. Based on this, author conclude that organizational culture emerges and changes in other factors. By examining relationship of these factor, author find the common relationship exists on these factor is management of innovation.

Frank Wiengarten 2012, asserts the importance of innovation ideas to the success of the TQM practices applies through contingency theory. Author identifies the contextual role of innovativeness is the success of the organization through data collected large scale survey and robust results. Though these result, author identifies the seven practices are essentially related to the TQM such as process management, visionary leadership, continuous improvement, employee fulfillment, external and internal corporation, learning and customer satisfaction.

Conceptual Framework of Innovation:

The innovation framework has been created to generate, assess and fund the best technology, process and intellectual property (IP) innovations that will create value for our external and internal clients, shareholders and members. The program is implemented through a collaboration site that facilitates the posting of ideas and managing the collaboration around them. The conceptual framework of innovation has differed from each organization. Based on the business strategy of organization the conceptual framework has designed. Here it will discuss the basic common framework followed by all organization. It is a strategic approach to the innovation that provides a way to a new ideas process and how it is implements. It identifies the technological activities in an innovation environment. This framework made a great contribution to innovation analysis in corporate strategy design. Its improves the strategic analysis and proposed the framework for dynamic capabilities of company strategy. A Dynamic capabilities describes a firm's ability that to build, integrate and reconfigure external and internal competences to address quickly changing environments and make use of opportunities continuously. Or, rather, a company's ability to restructure, allocate and use core capabilities to keep up with the times. Activities includes in a framework are a) posting ideas b) commenting ideas c) rating ideas d) reviewing ideas e) refining ideas f) expert opinion about ideas g) selecting key ideas h) Funding & track process and i) implement and success. [refer fig (3)]

For Innovation process and implementation, organization are formed a client innovation program committee. The committee creates the leader for each unit in the organization. Leader is responsible for process of the innovative ideas. Process are starts from collecting the innovative ideas from the employees in the organization. Innovative ideas should be in any one of innovation theme's like Business, technology and society. Ideas are collected from employee's it will be posted in the respective sites which are used in the organization and accessible to all employees. These innovative ideas are go through by colleagues, leaders, heads and international heads in organization. All employees will be able to registered the comments, suggestion against the innovative ideas. After finish the collecting ideas, the voting process has started; all employees have a rights to rating the ideas. Top ranked ideas are reviewed and refined by the leaders and unit heads with respective employee. In end of the review meeting, they conclude design, business flow, functional flow, process, framework and technology used with expert opinion and allot the funding to innovative process. Based on ideas review, team has created with technical and functional team. Team has designed the software/product for selected innovative ideas with help of current technology. Designed software has tested with Business and Quality Assurance(QA) team. If any defect it will redesigned based on the comment on QA team. After successful final design of software, it will implement in the client environment. Client innovation program committee providing a collaborative, creative and stimulating space innovative ideas with client.

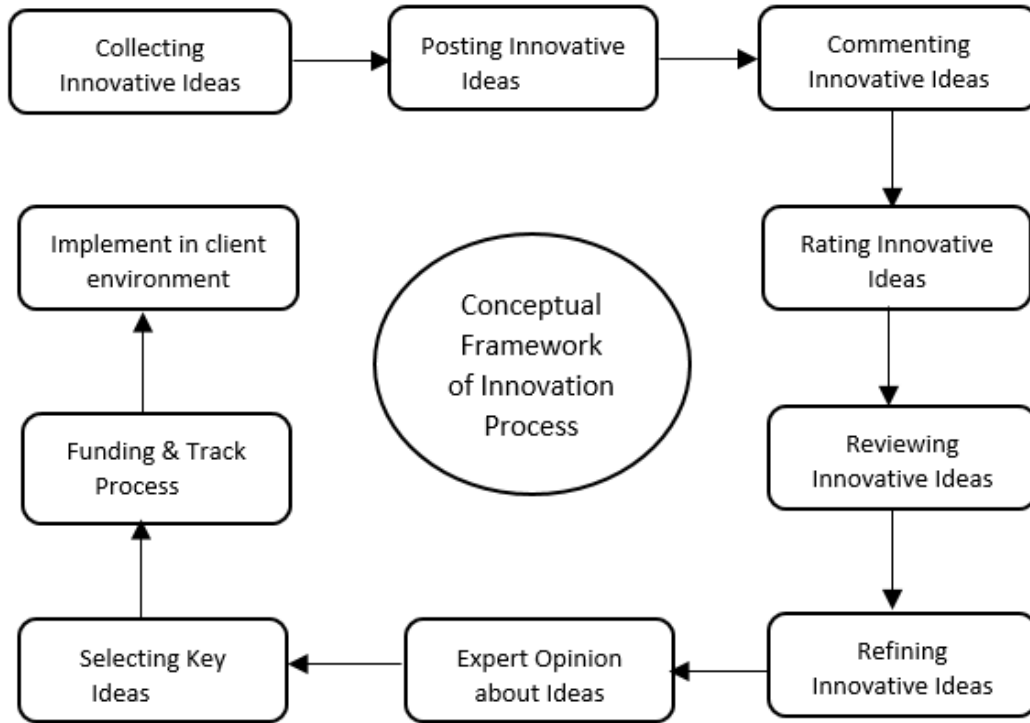


Fig3(Author own model): Conceptual framework of Innovation Process

Digital Business Model Innovation:

In the digital market place, innovation is a key to gaining a competitive advantage. But unless a company’s business model anticipates and supports innovation, that advantage will be squandered. An innovative business model is the most import innovation a company can invest in. There are many options for innovating business model. The option an organization choose should reflects the characteristics and culture of the organization. Digital innovation involves expanding the boundaries of your business model and they transformed their business model to encompass a different type of ongoing relationship with customers. Digital Innovation should grow organically from what’s made the organization successful in the past. To truly succeeds in the digital market place, an organization must understand the core principle of the business. These principle, whether dedicated to customer service or superior product or user-friendly design, are captured in the organization’s mission and vision statement. With those core principles, as a solid base to build from, organization can free themselves to imagine all the possibilities for innovating their own business model. Generating ideas for business model innovation involves two stages, play with design and plan for success. The design stage is a brainstorming process and it is generating idea for innovation, encouraging a broad range of possibilities. The plan for success is the analysis and implement innovation to the client.

The Business Model Innovation has described the framed process of business to deliver the Innovation Idea’s to the client. To share the innovation solution and implemented business we need the mutual language and framework. Each and every company they follow their own Business model to implement the solution. Business Model Innovation (Fig 4) combines the difference framed and provide the single value innovation ideas to the client. It includes a) Value Proposition b) Customer Relationships c) Key activities d) Key partners e) Customer Segments f) Key Resource g) Cost Structure h) distribution channel and i) Revenue streams.

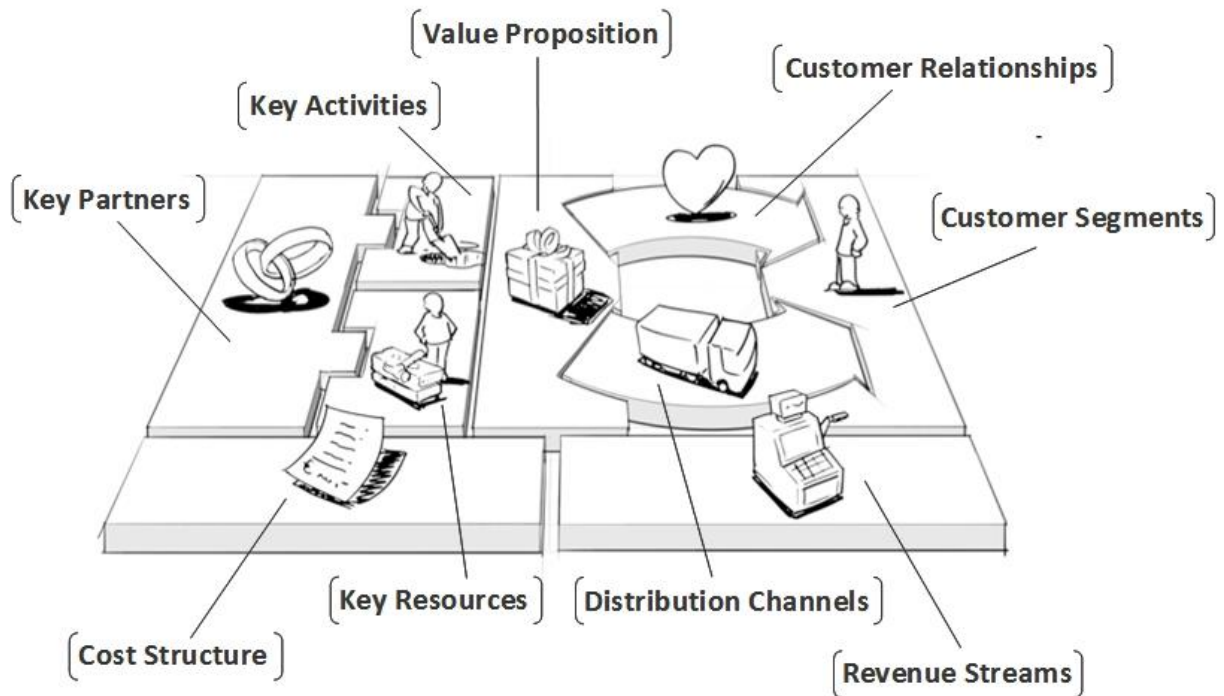


Fig 4: Author own Digital Business Model Innovation

- The Building Block of **Customer Segments** defines different sets of peoples or organizations an initiative aims to reach and serve an innovation solution. e.g. clients/employees of the client. Based on the requirement of the client, the organization provides the solution or new innovation ideas to the process.
- The Building Block of **Value Propositions** refers a bundle of services and products that create an innovation solution for a specific Customer Segment.
- The Building Block of **Distribution Channels** describes how an organization communicates with and reaches its Customer Segments to solution deliver an innovation.
- The Building Block of **Customer Relationships** defines different types of relationships a organization establishes with specific Customer Segments.
- The Building Block of **Revenue Streams** represents the cash a company generates from each Customer Segment.
- The Building Block of **Key Resources** defines the assets and equipment are required to make a business model work. I.e. resources involved to create the innovation solution.
- The Building Block of **Key Activities** defines an important things in a company must do to make its business model work for each & every innovative idea.
- The Building Block of **Key Partnerships** defines the network of partners and suppliers that make the business model work for innovative idea.
- The Building Block of **Cost Structure** defines all costs experienced to operate a business model. To get return on the investment this must be managed throughout the innovation process.

Conclusion:

This study has to provide the influence of innovation's in Indian IT Industry, review a literature on the effect, impact of the innovation in service organization and to develop a conceptual framework of the factors involved in the organization and business model innovation. The theoretical framework and business model of innovation helps the manager and top management to flow up innovation process and implement the innovation ideas on environment. To success of the IT organization relies on innovation and high technology management, which continuously pushes forward the improvement of organization quality and productivity. The organization improve service product value and gain competitive advantages through innovative activities.

Reference:

1. Timira Shukla & Anita Singh (2015). Organizational Factors influencing innovation: an empirical investigation. January 2015 *Journal of Strategic Human Resource Management* 4(3).
2. Yongan Zhang, Umair Khan, Seoyan Lee and Madiha Salik (2019). The influence of Management Innovation and Technical Innovation on organization performance. A mediating role of sustainability. *Sustainability* 2019, 11, 495.
3. Abdul Talib Bon, Esam M.A. Mustafa (2012), Impact of Total Quality Management on Innovation in service organization: Literature review and new conceptual framework. *ScienceDirect Procedia Engineering* 53 (2013) 516 – 529
4. Faruk kaly, Gary S. Lynn (2016), the impact of organizational structure on management innovation: An empirical research in turkey. *Journal of Business, Economics and Finance (JBEF)*, ISSN: 2146 - 7943
5. Sarminah Samad (2012), The Influence of Innovation and Transformational Leadership on Organizational Performance. *Procedia - Social and Behavioral Sciences* 57 (2012) 486 – 493
6. Guangfei Changli, Feng Ruize Maa (2020), Identification of the factors that influence service innovation in manufacturing enterprises by using the fuzzy DEMATEL method. April 2020 *Journal of Cleaner Production* 253:120002
7. Anu P. Anil, Dr. Satish K. P (2015), Investigation the relationship between TQM practices and Firm's performance: A conceptual framework for India organizations. *ScienceDirect Procedia Technology* 24(2016) 554 – 561
8. Marisa Smith, Marco Busi, Peter Ball, Robert van de Meer (2008) Factors influencing an organisation's ability to manage innovation: A structured literature review and conceptual model. December 2008. *International Journal of Innovation Management* 12(04):655-676
9. Dr. S. Sudha (2019), Knowing the requisites factors and skills for career development of MBA student. *Journal of the Gujarat Research Society* ISSN:0374-8588 volume 21 issues 16s.
10. Frank Wiengartena, Brian Fynesb, Edwin T.C. Chengc and Roberto Chavezd (2012) .Taking an innovative approach to quality practices: exploring the importance of a company's innovativeness on the success of TQM practices. *International Journal of Production Research*, 2013 Vol. 51, No. 10, 3055–3074