

Impact of Technological Innovation on Quality of Management

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Abstract: *The main purpose of this paper is getting knowledge how technology innovation has impact on the quality of management in its execution. Execution of new technological innovation is not an easy task for the management. Management must fully equipped for handling the new technology in an organization our society always look for new invention for full filling their needs it is a duty for the manager to help organization to adopt and to execute new technological innovation in better way for achieving their goals and for gaining goodwill in the market. Technical innovation considers an important step towards the growth of economy and also helpful for improving the standard of living. Technical innovation is requirement of our society by these types of innovation we can increase our customers by giving what they want but this is possible only when organization has a effective management and qualified managers those who are able to understand how new technological innovations will execute by optimum utilization of resources .*

Indexed Terms - Technological, Innovation, Quality management

I. INTRODUCTION

Technological innovation is a new face of quality performance which helps to create an infrastructure for growth of economy and development of an organization and also work for measuring the quality of management for its execution. We see an outstanding harmony between technological innovation and management in its execution. In effective execution of technology considers modernism execution from the range of lenses including proper leadership, organizational culture, talent management and capabilities of management. Management must create a future plan for dealing with its organization most critical execution issues with proper understanding of cultural impact on implementation barrier to the technological changes and cognitive biases affecting implementation. Technological innovations and its executions shows effectiveness when it implementation comes through qualified management teams and effective organizational design which fully support to the new facts and finding of technology. The quality of management will improve when innovation strategy truly Inspirable and desirable for the growth and development of an organization for gaining reputation in the market.

II. OBJECTIVES

The specific objectives of study are: -

- To examine the impact of technological innovation on quality of management and its execution
- To support the new technological innovations
- To work on creating space for new and effective products in the market
- To grow the economy and standard of live

III. INDICATORS OF TECHNOLOGICAL INNOVATION

Technological innovations are needs of product and services for gathering popularity and continence in the market without innovation no such products or services will survive in the market innovation is necessary for an organization to fulfill the needs of their customers and when will we talk about the technological innovation first thing that comes our minds is telephones and television yes, these product got a excellent innovation these innovations are not only helpful for an organization to stay in the market but also got the satisfaction from their customers. Technological innovations are takes place with the help of effective research and development department who work on scanning the environment of market and customers requirement from an organization and after gathering the information they start working unconditionally for the growth and expansion of their organization and to satisfy their internal and external stakeholders.

Technological innovations create new technology and knowledge influential in developing new products, processes and services to boost competitive advantages of the organizations while meeting the needs and requirements of their customers. To remain innovative organization must stay with their inner and outer stakeholders in bidirectional communication facilitating smooth trade of their needs and ideas Technological innovations provides structure for the organization to stay with its existing popularity in the market technology innovation reduces the chances of malfunction of product or services and it is also helpful to reduce bias as different users can concentrate on providing technological solution of the problems experienced.

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IV. MEASURES OF PRODUCT/ TECHNOLOGICAL/ FINANCIAL AND MANAGEMENT

Followings are some measures of technological innovation, financial and management.

Product/ Technology measures	Financial Measures/ Market Measures	Management Measures
New product or product improvement	Ratio of sales of new products to total sales	Innovative work behaviors
Patents/ Patent application	Ratio of sales of new product to R&D expenditure	Team innovativeness
Patent Citations	Total R&D spending	Organization Innovation
Invention disclosures or suggestions	Number of employees in R&D	
Process innovation	New Market	

Figure 1, Source: - measuring innovation part 1 – frequently used indicators (Leif Denti)

These measures make us to understand the how an organization work on a product according to the requirement and demand of their customer and for making organization to achieve their goals effectively and efficiently

A. Product/ technology measures

Product measure involves the existing product with improved features or develops the new product in the market some examples for product development are agriculture drones, mobile collaboration, ultra private smart phones, smart wind and solar power. These types of products are helpful for organization to work with their full efficiency by optimum utilization of their recourses more under product technology measure are patent or patent applications , patent citation some new inventions or suggestions and then to proceed with the process of innovation.

B. Financial Measures

Finance is life blood in the vein of organization without it it’s not possible for organization to move forward in the market or survive it involves the better sales for better profit it’s also involves business expenditures and spending with the motive to convert their spending in profitability. It work on calculating the ratio of sales of new product to total sales and also R&D spending and expenditures on various fields while entering into the new market.

C. Management Measures

Management is an important part of organization which is undivided part from the previous measures because previous measure are directly interrelated with management. Management work on innovation behavior with team innovativeness and also includes the organizational innovations.

V. MANAGEMENT SATISFACTION

Management play very essential role in the field of technological innovations. Technological innovation requires the following steps

- Strategy
- Innovation culture
- Competence and knowledge
- Organizational design
- R&D active inputs
- Financial performance

And to perform the above steps in technological innovation organization require the proper management to manage the innovation in proper and in smooth way. Management is not only work to perform the steps required in technological innovations but also to work in the field of marketing, finance and human resources to achieve goal established by the organization. Management work for creating new market for the product.

Management work to satisfy the technological innovation with its effective strategy by scanning the market and need of their customers which is truly inspired to achieve desirable future engagement for the organization and to create a network for developing and accessing the innovation for execution regardless of whether they are located inside or outside the organization and also provides the effective environment to the growth and development of the technological innovations by clarifying the responsibility and accountability of innovation.

VI. DIRECT EFFECT OF TECHNOLOGICAL INNOVATION ON QUALITY OF MANAGEMENT

Technological innovations are need of future for meeting the market and customers requirement technological innovations takes places in every organization, technological innovations gives the path to the organization towards the profitability and development technology needs innovation for maintaining its esteem for example computer, mobile phone etc are the technology which survive due to the innovation when we talk about the business, technological innovation has a direct effect on the quality management, innovation includes the new ideas, process, products or services in it. And effective technological innovation takes place with effective feedback of its product after its execution which is only possible with the help of management because management gives the support to innovations by promoting relationship between the supply chain network and information sharing of innovative product. Quality management helps technological innovation in enhancing employee’s contribution in whole process successfully and resourcefully.

Nature of technological innovation is depends on the requirement of new market and on the basis on technological innovation an organization must adopt the effective and quality management, quality training, teamwork, encouragement, original thoughts commencing all level of employee and promotes an information climate enhancing internal innovation which lighten that the quality management and technological innovations are interrelated and base of one another both work together for an organization to motive their



employees and to enhance the employees abilities to work more effectively and efficiently.

VII. RELATIONSHIP BETWEEN TECHNOLOGICAL INNOVATION AND QUALITY OF MANAGEMENT

Technological innovation and quality management are interrelate with each other both have relationship with progressed in leaps bound creating up to date marvel out of ideas considered unrealistic in the preceding eras. In fact, technological innovation has almost always been synonymous with improvement and had purpose in nearly every sphere of human existence innovation is not possible without the presence of quality management and when it comes to the execution of technological innovation the quality management plays an important role in creating market, environment and effective communication strategy.

Organization also enjoys the benefits of technological innovation and better quality management at the different level: -

- Difference in the global economy
- Difference in global standard

Increase in quality and sustainability Technological innovation works on new ideas, inventions and smart machines technological innovation will be most disruptive over the next decade. This will allow the organizations of technological innovation to harness data in order to adapt to new situations and solve the problem which is only possible when an organization will adopt the effective quality management. Emerging technology is revolutionizing the concept how markets and requirements of customers can be defined and used. This includes shifting technical infrastructure to an ecosystem enabling the market which is laying the foundation for entirely new business models that is forming the bridge between the technology and human

product, process or organizational innovations has been introduce which is possible by the effective efforts of quality management because quality management helps innovation in its execution effective communication skill, teamwork, advertisement, relationships and marketing is helpful for achieving desired goals of an organization.

VIII. TECHNOLOGICAL INNOVATIONS ARE ABOUT THE QUALITY MANAGEMENT IN ITS EXECUTION

Technological innovation is all about the new ideas, process, product but innovation needs to understand the execution challenges it requires the resources for execution which is only possible with the effective quality management .Management takes all the decision on the organizations benefits to achieve the organizational goals and objectives. So Management not only innovates the technology also executes the plan and look after the results get to implement the plan for moving forward Innovation must be closely and carefully managed, for the duration of the 99% of the voyage that is implementation. If organization has quality management then it never fails in organization because quality management is fully equipped with effective teamwork and qualified leader

Every person agree that the objective of modernization is positive change, to make a big name or incredible better. Entrepreneurs need it to start, and well-known companies need it to endure. The front end of innovation is the stimulating and sensational part. Implementation seems like furtively dirty work. But without the realism of execution, big judgment goes nowhere, even in startups. And carrying out is not possible without the quality management present in organization for the growth and development of the organization.

IX. CONCLUSION

- These results provide theoretical support for the impact of technological innovation and quality management in its execution. The impact of technological innovation on quality management has been discussed and empirically validated in literature. Our results more authenticate this constructive involvement. Our results, however, provide speculative support detail the various types of technological innovations and quality management and an overall consensus that it positively impacts product, process and managerial innovation.. Quality management increases the possibility of managerial innovation through brisk sharing and broadcasting of ideas within either a single or between multiple organizations. Our findings also provide further empirical support for execution of technological innovation with the help of quality management. We found both technological innovation and quality management moderate the execution by effective practice and performance, but in different ways. By observing managerial ethics enhances the relationship between technical quality management and innovation.

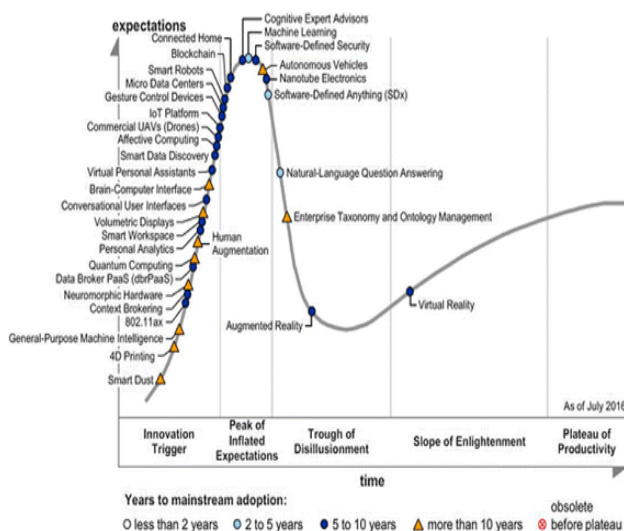


Figure3. Hype cycle for emerging technologies. Source: garter

Quality management supports the technological innovation by the human involvement that is working for developing and scanning of the market. The main component related to the study is measuring the innovation by the survey where new

REFERENCES

1. Innovation and R&D in the upper Echelon: The association between the CTO's power Depth and Breath and TMT's commitment to innovation – Florian Peter Garms and Andreas Engelen 05 March 2018
2. Innovation: The new Face of quality- Praveen Gupta 31 March 2009
3. Executive Education – Whart on university of Pennsylvania- By Nicolaj Siggel
4. 5 key points to consider when developing on innovation strategy- by Wouter Koetzier and Christapper Schorling
5. Innovation indicators throughout the innovation process: An extensive literature analysis- By Marisa Dziallas and Knut Blind Technovation volumes 80-81 February- March pages 3-29.
6. Measuring Innovation part 1: Frequently used indicators- By Leif Denti
7. 10 new innovations that could change the world- by Joshua Bleiberg and Hillary Schaub 10 June 2014
8. Effects of Innovation Types on firm performance- by Gurhan Gunday, Gunduz Ulusoy, Kemal Kilic and Lutfihal Alpkar
9. Impact of technology on management and organization – by Alfonzo Venturi 8 dec 2014
10. The impact of technological innovation on building a sustainable city- by Chai-le-goi Innovation is about execution-by Martin zuilling

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