

Technological innovations: scope in industrial economy

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Abstract

Change is the main feature of this universe. Modern business environment is changing rapidly. A business firm has to change itself according to the changing environment. New ideas, revolutions, methods and programmes are taking place in the business environment day by days. Adoption of new technology results into more satisfaction of the customers. New concepts of technology are useful for the management of framing the effective strategies according to the new trends. Modern competitive business environment requires technological innovation and discoveries for initiating the latest and advanced business projects. Government of India is supporting the technological innovation in the country by various measures. Technology affects the supervisory level of the organization. Nowadays organization makes use of CCTV cameras to monitor the working of the personnel which has increased the level of monitoring in the organization. Use of 3-D and 4-D technology has brought revolution in the printing industry. Use of Robotic Technology in the industrial sector is the unique trait of technology. This technique has been applied successfully in the medical sector.

Keywords: technology, innovation, national institution to transforming India (NITI)

Introduction

Change is the main feature of this universe. Modern business environment is changing rapidly. A business firm has to change itself according to the changing environment. New ideas, revolutions, methods and programmes are taking place in the business environment day by days. For the existence in the changing environment, business organization should focus on the latest ideas, and practices to beat the competition in the market. Adoption of latest techniques and methods enables the business to be more competitive and successful in the present dynamic environment. A business organization cannot survive without innovation.

Research methodology

This main objective of this paper is to highlight the importance of technological innovations in the context of industrial economy. This study is based on various published and online sources and covers the Indian industrial perspective and technological innovative promotional measures of the Government. Secondary data have been used as the main sources from which necessary information have been collected

for the purpose.

Role of technological innovations in industry

Technological innovation has an important role in the success of the business entity. Adoption of new technology results into more satisfaction of the customers. New concepts of technology are useful for the management of framing the effective strategies according to the new trends.

Technological innovation is the improvement to existing technologies, the creation of new ones or the act of performing old functions with fundamentally new building blocks.

---Brian Author

Innovative practices transform the approach of the organization towards its customers. If customers are satisfied, the business can attain the prosperity. Existing ideas cannot be effective for the long run. Business should focus on the generation of new ideas to grab the opportunities.

Technological innovation can be categorized into two parts as follows:



Fig 1

A. Evolutionary technological innovation

Evolutionary technological innovation includes improving the existing concepts through new technology and thinking process. In business, various practices and products require the modification and improvement, which can be attained through evolutionary innovative process. The relationship between all the levels of management requires evolutionary innovation. People accept the changes caused by the evolutionary innovation easily. Evolutionary innovation is less risky than revolutionary innovation. In the modern competitive era, the scope of evolutionary innovation cannot be ignored. People inside and outside the organization wants the change in the products and working styles. Changes in the existing practices are easy to understand and easy to apply in the practice.

B. Revolutionary technological innovation

Revolutionary innovation techniques generate new concepts. Revolutionary innovation is used in business to develop new products and new human resource practices. It requires high skill and efficiency to search new concepts. These innovations involve high risk. Business has to face resistance while applying revolutionary innovative practices. People do not accept these practices easily. Revolutionary technological innovation is important for new product development and latest management practices.

Case studies of technological innovation

1. Maruti Suzuki India Limited

Maruti Suzuki India Limited formerly known as Maruti Udyog Limited established in 1981, the leading car manufacturer of India launched its first Maruti 800 car in December 1983. This car was the cheapest car at that time. It was a small hatchback that was designed as per the requirements of Indian middle-class customer. This car did not face any competition until late nineties. In 1997, company presented Maruti 800 in the Jellybean design. After that other variants like Maruti 800 AC, Maruti 800 Duo and Maruti 800 Duo AC were also launched.

2. LML limited

LML limited launched its LML Vespa scooter in 1993. After that, the company modified its existing variants to NV series. In 1999, the company plunged the name "Vespa" and new name series of the scooter was initiated as LML NV and LML Select, LML Sensation, LML Trendy etc. In 2003, the company launched its first bike "Freedom" but the bike could not maintain its share in the market for long time. Recently the Company has launched its 150cc Star Euro Automatic scooter with a full metallic body.

Modern competitive business environment requires technological innovation and discoveries for initiating the latest and advanced business projects. Government of India is supporting the technological innovation in the country by various measures. The National Institution to Transforming India (NITI) has been established by the Government, to persuade the researchers, entrepreneurs and scientists to involve in the research innovations.

Conclusion

Technological developments have many types of effects on the establishment of organization. With the use of technology, the plant and machinery can be easily moved and established in less time. Technology has made the process of construction very easy. Wastage of material and energy has become nominal in the modern age of new technology. Technology has the effect on every organizational function like chain of command, hierarchical system, communication, Delegation of authority and controlling. Decision making process is also affected by the use of technology. For example, if software has been provided at factory level to fix the mixture of various materials for the process, then the process can be started without any delay that would have been occurred due to consultation with the expert. Technology affects the supervisory level of the organization. Nowadays organization makes use of CCTV cameras to monitor the working of the personnel which has increased the level of monitoring in the organization. Use of 3-D and 4-D technology has brought revolution in the printing industry. Use of Robotic Technology in the industrial sector is the unique trait of technology. This technique has been applied successfully in the medical sector.

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