

## Chapter 28

# Technological Innovation in Academic Libraries Among Universities: Librarians' Perceptions and Perspectives

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### ABSTRACT

*Innovation is no longer an option but a necessity for an organization to survive during a crisis. Innovations in terms of products, process, technologies, and services, can effectively be used to resolve the crisis of the current educational system to survive and thrive in the 21<sup>st</sup> century. Academic libraries should re-think and re-invent the existing technologies, services, and facilities to fulfill the demands of users. Management, organization, and dissemination of information can be done quickly and effectively with the application of information and communication technology (ICT) in an innovative way. Technological innovation (TI) can be considered as an innovative solution for the sustenance of libraries during a crisis. This chapter attempts to describe the essence of TI in academic libraries and highlights the perceptions of librarians on TI in the university libraries system in India. Therefore, this chapter will explore individual innovative behavior and its influencing factors on technological innovation in academic libraries in Indian universities.*

## **BACKGROUND**

Innovative behavior is considered as a crucial element for effective functioning and survival of the organization, as it leads to the implementation of new and useful methods for performance (Grant, 2000). Such behavior in employees has great importance for organizational outcomes; and in many organizations, different actions are taken to stimulate innovativeness within employees (Martins & Terblanche, 2003). Thanks to a rapidly changing environment, the realization of the importance of innovation towards organizational survival and success has been increasing significantly with every passing day. However, much literature has been developed pertaining to the domain of organizational innovation, while little has been studied on the construction at the individual level (Martin, Salanova & Peiro, 2007; Parker, Williams & Turner, 2006). During the last decade, there have been numerous innovations in terms of technologies, services, and tools developed, which have a significant impact on the higher education system. Innovation is no longer an option but a necessity for the organization to survive during a crisis. Innovative technologies, services, and tools can be potentially exploited to resolve the crisis of the current educational system to survive and thrive in the 21<sup>st</sup> century.

It may not be wrong to say that most of the academic libraries are dazed and confused in current times. They are trying hard to rework on their mission and relevance for technology, which anchored their knowledge over the past half millennium is being usurped, thanks to the rapid revolution of information technology. The development of print in the 15th century and the 19th-century industrialization of print has made libraries what they are, or to be precise, what they were. However, with the beginning of the Web era in 1993, the libraries had to decide with surety toward going beyond authority, control, and classification of information. They ought to redefine their roles in the current and future information ecology, lest they are content with being transformed to a little-used museum of the book (Lewis, 2007). Thus, the academic librarians must innovate to reinforce their utility.

## **Defining Technological Innovation**

Innovation is discussed very frequently in the literature of academic libraries, but it remains an ambiguous and narrowly defined concept. Hence, it is important to analyze and argue the importance of innovation in the context of this study. Innovation is nothing but the newness in service, product, process, techniques, and methods applicable to an organization. Damanpour defined innovation as “the introduction into the organization of a new product, a new service, a new technology, or a new administrative practice; or a significant improvement to an existing product, service, technology, or administrative practice” (Damanpour, 1996). Baregheh, Rowley, and Sambrook (2009) categorically defined innovation as a multiple-stage process whereby “organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace”. Based on the above concept and innovation frameworks, innovation can be of many types having the number of attributes and multiple stages on which organizations have to ultimately adapt and follow for survival and success. Daft differentiated the theory of innovation into three categories i.e administrative or technical, incremental or radical, and ambidexterity i.e the initiation and implementation stages of innovation (Daft 1978). Technological innovation is one of the important types of innovation, which is much essential in the digital era.

Technological Innovation (TI) is the combination of new products and processes having significant technological changes in products and processes in an organization. Technological innovation is the

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