

# Chapter 4

## Identifying Key Barriers for Successful Technology Adoption

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### **ABSTRACT**

*Technology adoption has been critical to the organizations as it is a deciding factor for successful business in the global market and a way to cope with hyper competition. Many industries have clearly not been successful in implementing or integrating new technology. This chapter reviews and discusses the key barriers in adapting the technology and drivers which would be supportive to overcome these key critical barriers. This could be apt and clear for an organisation to review the key factors that need to be assessed in the initial stage for a successful adaption of technology.*

### **INTRODUCTION**

The rise of the internet has opened doors to technology advancement, which have led the marketers and manufacturers to connect with the consumers more effectively. In recent trends the technology plays a vital role in setting up a pace for any organisation of different sectors. Overall all the system is being constantly questioned in order to adopt the current technology in their respective field to sustain in the global market (Pavic et al., 2007). Adoption to a new technology in various fields have been initiated, especially in agriculture and medicine where conventional ways are effective but to improve the efficiency and relationship factors within, adoption of new technology is quite essential. In the fast growing market adoption and frequent use of technological advancement such as e-commerce, online payments and financial management is done with the help of online mode (Dierckx & Stroeken, 1999). The consumers are setting up the pace for the advancement and in turn the companies are required to convert to latest

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technology for their success. The general public is adapting to new technological advancement and in turn the companies also need to adapt to the latest technology. During the phase of adoption they need to evaluate among the various available technology and which technology they would incorporate for their overall strategy for successful implementation (Premkumar, 2003). Among the advancements, Internet of things is current trending topic in the business world. It is said to be the global infrastructure connecting the physical entity to the virtual objects through internet. This is expected to increase exponentially in the upcoming years as the potential of the technology is very high. The technology adoption have been crucial as they would incorporate various studies or collecting high volume of consumer data in order to study the behavior pattern to assess the global market scenario. This would also enable the system to send relevant local message to the consumer. This also opens the door to participate in social networking to increase the brand value and product co-creation enabling more consumable products. In the global market more than one fourth of the companies have clear vision for using new technology in products and services. They suggest that the lack of need is one of the key barriers. With the involvement of the government, the companies are up taking the advancement for betterment and not only for profit (Bhagwat & Sharma, 2007). Even the financial sectors are considering taking up technology as the conditions favoring them. Thus even through partnership is an area of concern; the companies are growing and spreading the need for adapting new technology. Retail industries are incorporating new strategy and technology to offer both online and offline supply chain to compete in the global market. In the view of the healthcare systems its crucial point to adapt to new technology is to increase the patient experience in various aspects. Various studies show that the technology adoptions have been assessed in the characteristic of the home country. Thus the aspect of adopting new technology needs cross-country relationship which could shed more knowledge in the process of developing and adapting to the technology (Grandon & Pearson, 2004). The technology adoption is more likely done by the younger generation as they have more time in the current scenario.

In the world of new tech we have to keep our heads clear on why to adopt a new technology and to be precisely sure about the tech model to have a positive impact on the system. Industries which have adopted new technology to book a cab have been revolutionized with the help of new technology which has increased the usage and customer friendly. This is quite an apt example for explaining why organization implements new technology (MacGregor & Vrazalic, 2005). As well as banking sector have implemented technology advancement in terms of mobile banking system, it is very effective and user friendly through constant upgrade it has enhanced the communication with its users effectively. The technology advancement clearly has many benefits such as reduced waiting time, ease of accesses, driving down cost and ease of transaction. In the developing markets people have leap frogged to smart phones from no landline or home internet. The important aspect for implementing a new technology is to innovation. How that could be interpreted could be either cost wise, profit increase, production increase, efficiency improved, speed & agility, storage, sharing, connectivity, automation and communication. It is important what the system is aiming to achieve through the new technology (Riquelme, 2002). The technology adoption has widely influenced every single person, agriculture, healthcare system, educational institution, supply chain, logistics, finance, telecom, construction, electricity, manufacturers, ecommerce, travel and tourism. Adoption of new technology leads to breaking the routine to understand them and to learn the new method could be some time frustrating. Thus during the technology adoption certain points to be addressed i.e. will it be user friendly? Will it have positive impact in the field and easily operable by the customers effectively? To address them could be crucial in adopting the new technology. There are numerous benefits in adopting the new technology but some are prominent such as higher customer, cli-

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