Chapter 55

BYOD (Bring Your Own Device), Mobile Technology Providers, and Its Impacts on Business/ Education and Workplace/ Learning Applications

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ABSTRACT

Outside the traditional business institutions and learning models, a number of organizations and academic institutions are looking to add bring your own device (BYOD) policies. Businesses and K-12 schools are supplying teachers with devices that can be an aid in working/learning; universities are increasingly allowing students to bring their own devices to add to the enrichment of the programs. BYOD-based technology and its applications have numerous benefits, but they can be difficult to implement. They usually result in lower costs for the business, but they often require the organization to adapt. Since there are so many constraints and situations that could inhibit the security of the business, some businesses are hesitant to use BYOD in their business.

INTRODUCTION

Concepts of BYOD

Until recently, was the norm for the employee could only do company work on a company device. Technological advances are now assisting individual's access to company information and applications on personally owned devices. BYOD (i.e., bring your own device), is making significant advances in the

business world with about 44% of employees already using it at work. Companies are having a hard time controlling the employees from bringing their devices into the office and believe that implementing a BYOD policy will help employees be more productive.

The concept of BYOD was introduced in 2009 and has grown rapidly in the past few years. As of 2015, 74% managers/professional workers stated that their organization is using or planning to use BYOD" and "just over a quarter of have ruled it out entirely (Hammond). According to Apple, using BYOD can boost mobile workforce. "Users connect their mobile devices to the network without assistance from IT, and get first-tier technical support through online reference documents and instructional videos" (Apple). Being able to use these mobile devices in a group setting can substantially improve work efficiency. The devices are more mobile and are easily functioned.

Another process in information systems that BYOD could be implemented with is cloud computing. When the business has a cloud server, the employees will be able to access company data and information from their mobile devices and desktop computers in the firm. Some businesses that already have BYOD are using their devices to connect to cloud services in order to save space on the firm's computers. Although cloud computing could be beneficial for the firms in terms of storage, some employees and administrators feel uneasy about cloud computing. Some of the data that needs to be stored is often confidential information about customers about the business. Allowing that information to be uploaded to the Internet and open for everyone to see could be hazardous for the firm in the long run. When employees bring their own device, they have to make sure that their devices are not jail broken or altered in anyway. This could cause data leakages within the company, which could later lead to lasting consequences. Anyone could get ahold of their information and leak data to the world. Ensuring that the firm's cloud computing is secured and protected is one of the biggest challenges in implementing it.

According to Qrunfleh, Tarafdar, & Ragu-Nathan (2012), one main cost for any firm is a lack of knowledge of supply chain integration and how to manage a company's inventory. A company does not want to order as many products as they can and expect to sell items immediately and successfully. BYOD would allow the flexibility of all members in the supply chain to access the level of communication technology needed to develop long-term supplier integration. It is very important to understand how supplier management practices and IS strategies can help a business improve their supply chain performance. To improve supply chain performance, a business needs to adopt specific information systems that support the processes and activities of their supply chain. In order to have an effective and enhanced supply chain performance, IS that a focal firm deploys in its supply chain should support and enhance the objectives and goals of supplier management practices. IS can assist a company with inventory control and provide its suppliers with production planning, so that, the right amount of inventory is made and that not too much is in production. The alignment of these aspects can provide a company with a low-cost supply chain and can reduce its labor cost as well as inventory costs. By using certain IS application aligned with supplier practices a company can have an improved supply chain performance.

Outside the traditional business institutions, a number of academic institutions are looking to add BYOD policies. For example, some K-12 schools are supplying teachers with devices that can be an aid in learning and universities are allowing students to bring their own devices to add to the enrichment of the programs. BYOD–based technology and it applications have numerous benefits, but they can be difficult to implement. Obviously, as with any technological innovation, there will always be adoption considerations and issues (Bruner & Kumar, 2005; Burton-Jones & Hubona, 2005; Chau, 1996; Chen, Gillenson, & Sherrell, 2002). Such technological innovations usually result in lower operating costs for

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