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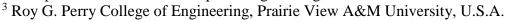
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IT CONSUMERIZATION

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Abstract:
The concept of IT Consumerization has received a lot of attention since the introduction of Bring-Your-Own-Device (BYOD) management practice. It is using privately-owned IT resources such as devices or software for business purposes. It is a wave that no organization can afford to ignore. It seems unstoppable or inevitable because of the proliferation of tablets, laptops, smartphones, cloud storage, social tools, and mobile apps in the workplace. Using the same technologies for both work and private life comes at a price. This paper provides a brief introduction to IT consumerization.

1. Introduction

We know that technologies, particularly information technologies (IT) dictate how people accomplish their work. Historically, organizations owned and controlled the IT their employees used: telephone, computers, mainframes, and timesharing systems. Today, more and more employees prefer to use their own personal mobile devices for work-related tasks [1]. They use private e-mail services, often from work. In addition to emails, there is a growing use of blogs, social networks, Google Docs, and other Web 2.0 services in the workplace. This phenomenon is part of a broader trend known as IT consumerization. This trend is driven by two key factors: mobility and advancement in technology. Mobility is believed to improve employee productivity and flexibility. Technology has matured to such a level that power has shifted to the hands of the consumer.

Consumerization has introduced a reversal of roles, where users/consumers are not driving technology adoption and change. Collaboration tools like instant messaging and social networking are finding their way into organizations. Digital natives are most likely to use information systems such as Facebook, YouTube, and Twitter for both personal and work-related purposes. Employees, also known as consumers, prefer using their own devices because they are used to a certain degree of ease-of-use, choice, freedom, flexibility and experience. Today employees are allowed to use their personal gadgets at work, which is known as Bring-Your- Own-Device (BYOD) or more generally termed as IT consumerization. BYOD and IT consumerization are closely related concepts [2, 3].

The consumerization of information technology (IT) refers to consumer using IT resources, such as laptops, tablets, smartphones, social media, or cloud storage, for business purposes. It is also known as the diffusion of consumer IT in the workplace environment. It applies to bringing hardware (BYOD) to workplace and software, social media, and cloud-storage solutions [4]. Consumer IT tools are entering organizations and are changing the way employees use technology for work. Consumer IT and the permission to use private IT tools exert positive effects on employees' innovation behaviors.

IT consumerization is taking place in two ways. First, many employees are consumers of IT and are becoming familiar with broadband, wireless networks, multimedia, social media, digital cameras, smart phones, and computing. This strategic orientation of products and services towards users is known as consumerization of IT. Second, IT consumerization is the shift from the IT department dictating what electronic device a worker can use to the worker selecting his or her own device. This leads to a significant change in the IT innovation paradigm from a top-down to a bottom-up approach.

2. Benefits

Today, IT tools are omnipresent. IT consumerization has made a great impact on organizations. It has brought convenience and compatibility among various devices running different operating systems. It has increased the productivity, collaboration, and multitasking of employees. It has reduced the cost of ownership of hardware for companies. Other benefits from consumerization include potential cost savings, greater job satisfaction (helping to attract and retain staff), stronger recruitment, bottom-up innovations, increased IT workload, and improved customer engagement [5]. The technology-savvy employee who is determined on selecting his own IT tools can be an asset to the company. This self-reliance not only reduces the burden on IT staff but also offers the company partners in innovation.

IT consumerization is widely adopted all over the world. Typical applications include cultural institutions, work places, business, healthcare, public libraries, and education.

3. Challenges

Although IT consumerization has many clear benefits, not every organization is comfortable with the concept. Some are adopting wait-and-see approach. Rather than avoiding it, organizations need to face up to it and overcome the challenges. They should proactively look at adopting the concept to modernize their business systems.

There are a number of challenges to overcome when employees use their own devices, including security, compatibility, and data-sharing issues. The IT department faces an increased level of difficulty with the management of supporting various platforms. The increased proliferation and complexity of IT products and the attendant bandwidth requirements tend to create more confusion [6]. An increased heterogeneity of IT can lead to knowledge gaps between individuals.

There are security risks involved in the consumerization of IT Security issues dealing with data integrity, confidentiality, and authentication. Managers face the challenge of satisfying employees who want to bring these devices to work on one side while preventing security breaches or data

loss on the other. But breaches are also possible on official equipment as well. In order to allow employees to use their personal devices, companies should encrypt the hard drive of the laptop so that only an authorized user can access the data stored on it. Since mobile devices are password protected, using a wrong password will result in the erasure of data.

What makes IT consumerization unsettling to some corporate leaders is that it signifies a shift in the control of information. As shown in Fig. 1 [7], IT consumerization phenomenon will have serious consequences on IT department. Changes introduced by IT consumerization are redefining the role of IT. Some claim that as technology is easier to consume and provided in a self-service manner, the role of IT department goes away or IT department becomes irrelevant. IT consumerization is not replacing IT department but reducing the demand for IT services and freeing up IT staff to perform more complicated tasks. The professionals in the IT workforce have been advised to adjust to a culture of increased IT consumerization [8].

Figure 1: Consumerization of IT [14]

4. Conclusion

IT consumerization, the use of privately-owned consumer IT devices in the workplace, is an emerging, fast-growing trend. It has moved fast from a 'toy' to a 'threat.' It has moved from a buzzword into an unstoppable disruptive force to be reckoned with. Organizations now allow or encourage their employees to Bring-Your-Own-Device (BYOD). With the growing popularity of cloud computing and platform independent applications, IT consumerization will become easier to adopt in the near future [9].

Although challenges remain, organizations must see how best to implement and manage IT consumerization to realize its benefits while minimizing its risk. Forward-thinking companies are embracing the opportunity to give their employees new levels of productivity and flexibility, with the ability to work from virtually anywhere using the tools of their choosing. A progressive attitude toward IT consumerization is good for business. If the past reflects the future, IT consumerization will not go away.

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