

Chapter 3

Benefits of Bring Your Own Device in Healthcare

Filipe Portela

University of Minho, Portugal

Ailton Moreira da Veiga

University of Minho, Portugal

Manuel Filipe Santos

University of Minho, Portugal

ABSTRACT

Bring Your Own Device (BYOD) has become very popular topic in information technology because this approach allows the employees to bring their personal devices into organization and they want to use them to access the organization information. This trend has some benefits both for organization and to employees. This paper aims to identify those benefits as well the advantages and disadvantages of BYOD usage in organization. Also, it is present a SWOT analysis of BYOD usage. It is introduced an approach about BYOD in healthcare also. Utilizing personal devices at work is beneficial to organizational employees because they are in some way satisfies, and they have more freedom and choice to use their devices. This freedom and choice can easily lead the employees to be more productivity, flexibility. The organization who embraces BYOD policies found their employees happier, more productive, and more collaborative.

1. INTRODUCTION

The growing evolution in the development and adoption of the information and communication technology initiative has also internationally evolved the trends of the Bring Your Own Device (BYOD) that is rapidly changing the operating methods of the organisations to achieve greater efficiency and productivity. In a globalised and connected world, more and more organisations employees are bringing their own devices to the workplace. Although there are cases where the organisation itself offers the mobile devices to its employees, but not all employees use these devices. They already have the device

DOI: 10.4018/978-1-5225-2851-7.ch003

Benefits of Bring Your Own Device in Healthcare

itself and can use them in the workplace, i.e. this evolution brought new opportunities to employees as it allowed them to bring their own devices to the workplace and integrate them into the organisation's network instead of using the organisation's devices.

The use of personal mobile devices by employees of organisations in the workplace has become a new paradigm. Organisations with this paradigm encourage and enable their employees to bring their mobile devices into the organisational network and encourage them to use them during their activities.

The reason that motivated the development of this article is the identification and explanation of the factors or benefits that BYOD has for organisations. Therefore, the main objective of this article is to identify and explain the benefits, advantages, and disadvantages that organisations might have with the implementation of BYOD policies. This new approach has provided significant evidence of the benefits to organisations both from the organisation's employees, but also from the organisation itself.

This article will present and discuss the main benefits, advantages, and disadvantages, and SWOT analysis that this approach has for both employees and the organisation itself. Also, BYOD in healthcare is presented. With this, it is intended to identify the firm readiness that this approach brings to the organisations.

The structure of the article is: the first chapter is the introductory chapter, the second chapter presents a background study, the third chapter is the introduction of the BYOD approach. Also, in this chapter, the benefits, advantages, and disadvantages of this approach for organisations are explained. The fourth chapter presents a SWOT analysis of BYOD for organisations. The fifth chapter presents a brief introduction of benefits of BYOD in healthcare. Finally, the sixth chapter, which is the final chapter, presenting the conclusions and the final considerations in the article.

2. BACKGROUND

By applying BYOD policies in an organisation, it is required some knowledge about its background. This background knowledge is about pervasive / ubiquitous computing, and information in real time because organisation employees need information in real time to develop their works.

Pervasive also called ubiquitous computing, is the growing trend of embedding computational capability into everyday objects to make them effectively communicate and perform useful tasks in a way that minimises the end user's need to interact with computers as computers. Pervasive computing devices are network-connected. The terms pervasive / ubiquitous signify "existing everywhere", basically devices that use pervasive/ ubiquitous computing are totally connected and consistently available (Media, n.d.).

Ubiquitous Computing is a paradigm in which the processing of information is linked with each activity involving connected devices; it can occur at any time, on any device, at any location, and in any format (Media, n.d.; Sen, n.d.).

The idea behind using BYOD in the organisation with pervasive and ubiquitous computing is to provide a real-time smart environment for accessing information and application through a new class of ubiquitous, intelligent devices that can facilitate the work when and where it is needed. This situation means that pervasive and ubiquitous computing can be the first step to having right BYOD policies implemented at the organisation.

The evolving concepts of pervasive computing, ubiquitous computing and ambient intelligence are increasingly influencing healthcare and medicine. Because of its ubiquitous and unobtrusive analytical,

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/benefits-of-bring-your-own-device-in-healthcare/187514

Related Content

Consumers' Preferences and Attitudes Toward Mobile Office Use: A Technology Trade-Off Research Agenda

Xin Luo and Merrill Warkentin (2009). *Mobile Computing: Concepts, Methodologies, Tools, and Applications* (pp. 2203-2211).

www.irma-international.org/chapter/consumers-preferences-attitudes-toward-mobile/26660

Contemporary Issues in Handheld Computing Research

Wen-Chen Hu, Yanjun Zuo, Lei Chen and Hung-Jen Yang (2010). *International Journal of Handheld Computing Research* (pp. 1-23).

www.irma-international.org/article/contemporary-issues-handheld-computing-research/39050

Adaptive Mobile Sink for Energy Efficient WSN Using Biogeography-Based Optimization

Ajay Kaushik, S. Indu and Daya Gupta (2019). *International Journal of Mobile Computing and Multimedia Communications* (pp. 1-22).

www.irma-international.org/article/adaptive-mobile-sink-for-energy-efficient-wsn-using-biogeography-based-optimization/232685

Mobile Agent Protection for M-Commerce

S. Guan (2007). *Encyclopedia of Mobile Computing and Commerce* (pp. 429-435).

www.irma-international.org/chapter/mobile-agent-protection-commerce/17113

MIMO-Based Secret Key Generation Strategies: Rate Analysis

Kan Chen and Bala Natarajan (2014). *International Journal of Mobile Computing and Multimedia Communications* (pp. 22-55).

www.irma-international.org/article/mimo-based-secret-key-generation-strategies/130480