

EXAMINING THE INDIVIDUAL ACCEPTANCE OF THE INTERNET OF THINGS (IoT) TECHNOLOGIES

Non-Refereed Research Abstract

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ABSTRACT

Everyday life is becoming more saturated with advanced information and communication technologies. In a report published by Cisco in 2011 and titled “The Internet of Things, How the Next Evolution of the Internet Is Changing Everything”, it is predicted that there will be 25 billion devices connected to the Internet by 2015 and 50 billion devices by 2020. The increasing number of devices connected to the Internet paves the way for the new era of the Internet of Things (IoT) computing in which almost every object surrounding us can be transformed into smart entities by equipping objects with sensors, actors, and connectivity technologies. The transformation of things into smart objects will allow the things to gain new IoT-enabled capabilities, and consequently, provide new services to the user. However, Internet of Things (IoT) will bring a new wave of challenges and risks to information security, data privacy, and user trust.

In this study, we seek to examine the individual acceptance of IoT technologies. More specifically, we examine the individual attitude and behavioral intentions toward IoT technologies in the context of home automation or smart home. Drawing on the unified theory of acceptance and use of technology (UTAUT2) (Venkatesh et al., 2012), we propose an integrative theoretical model that extends UTAUT2 by adding new constructs that offer a better understanding of the factors influencing IoT acceptance and use. The study is expected to contribute to the literature by identifying the key factors that influence the initial acceptance and use of IoT technologies through an integrative theoretical framework.

Keywords

Internet of Things (IoT), Smart home, IS acceptance and use.