

# Chapter 38

## Review of ICT Adoption Research in Arabic Countries: Trends and Future Research

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### ABSTRACT

*Information systems (IS) researchers have intensively investigated information and communication technology (ICT) adoption. However, very little research has analyzed ICT adoption in the Arab region. This paper aims to review research related to ICT adoption in the Arab world to identify the current state of this research area and provide direction for future research. Fifty articles that addressed ICT adoption in three Arabic countries, namely United Arab Emirates (UAE), Jordan, and Egypt, were found and selected for review. These articles were analyzed based on a research framework that included eight elements: the selected Arabic countries, applied theoretical models, adoption factors, type of adopted ICT, applied research methods, level of adoption, publication year, and quality of publications (i.e. journals ranking). This paper discusses the current trends of ICT adoption research in the Arab region based on the findings of this analysis and provides two main directions for future research: conceptual and theoretical research development and methodological research.*

### INTRODUCTION AND MOTIVATION

Technology adoption research has been a core area in information systems (IS) literature since the 1980s, when Davis (1989) developed the technology acceptance model (TAM). Technology adoption is considered the most widely researched topic in the IS field (Venkatesh, Morris, Davis, & Davis, 2003). Technology develops continually and rapidly, which motivates IS scholars to investigate factors that influence the adoption and use of emerging technologies. The literature review examines the extensive research that has investigated users' and organizations' intentions to adopt and use new technology in different contexts and applications. However, no previous research has analyzed ICT adoption research in Arabic countries with the aim of studying this research area's status and providing insights and direc-

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tion for future research work and contributions. Previous work by Monchak and Kim (2011), Williams et al. (2009) and Jeyaraj et al. (2006) reviewed IT adoption and diffusion literature but did not focus on the Arab region or provide a broad picture on research trends in this part of the world. Therefore, this research aims to fill this gap. To our knowledge, this is the first research work that reviews ICT adoption research in Arabic countries.

## **RESEARCH METHOD AND FRAMEWORK**

The first stage of this research was to gather research articles that addressed the adoption of any technology (applications/software and hardware) within the selected Arabic countries. In this stage, six major IS journals were targeted, as well as two other top journals and two conferences, that are ranked “A,” as these have significant impact due to the high quality of the articles published in these journals and conferences. The targeted journals and conferences were the following:

- European Journal of Information Systems (EJIS);
- Information Systems Journal (ISJ);
- Information Systems Research (ISR);
- Management Information Systems Quarterly (MISQ);
- Journal of Management Information Systems (JMIS);
- Journal of Association of Information Systems (JAIS);
- Communication of AIS (CAIS);
- Journal of Information Technology (JIT);
- International Conference in Information Systems (ICIS); and
- European Conference in Information Systems (ECIS).

A search was conducted in each journal’s database and, surprisingly, only one article was found. As a result, the second stage targeted any peer-reviewed articles that addressed ICT adoption in selected Arabic countries published in IS/IT-related journals ranked “B” or “C” as well as other, non-ranked journals. Fifty related articles were found by searching several databases, such as ProQuest, IGI Global journals, Google Scholar, and others. The number of articles that were considered during the search and review process was much larger than 50. Some papers were not considered because they 1) addressed other research topics, such as IS security and outsourcing in Arabic countries; 2) were published in conferences other than our targeted conferences; or 3) focused on adoption in Arabic countries other than the countries selected for the current research. Therefore, the search process continued until all articles related to the three countries chosen for this study were found. This process ended with 50 articles considered for the analysis. In the third stage of this study, the articles were reviewed and coded according to the framework elements presented in the following subsections. The process of reviewing the articles required reading the full articles in order to obtain data and insight for this research’s framework elements.

### **Research Framework Element 1: Selected Arabic Countries**

The Arab world consists of 22 countries, with a majority considered as developing countries. It has a combined population of around 340 million people, with over half under 25 years of age (Arab World

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