A FRAMEWORK TO STUDY FACTORS INFLUENCING THE ACCEPTANCE OF INFORMATION TECHNOLOGY IN YEMEN GOVERNMENT

By

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ABSTRACT

Organizations around the world are looking for the development and keep up to date with emerging technology. Thus, they pay more intention to develop their technology infrastructure to improve productivity, effectiveness, or to adopt e-government. However, in reality, not all companies adopt and use effectively, or even use, information technology. And in reality, not all employees in organizations accept, adopt, and use effectively, or even use, information technology. When this happens, there is a gap between the ideal and the reality of the actual usage of information technology. As a result, there is need to study and understand the factors affecting the acceptance of technologies. This study aims to test the success of the technology acceptance model in Yemen culture. In addition, This study aims to investigate the factors influencing the acceptance of technology in Yemen public sector. This study developed a framework based on two theories, TAM 2 and UTAUT. In addition, the study added two important factors of organization culture and government support to the key factors in the theory of technology acceptance in order to provide better understanding for the factors influencing the acceptance of information technology among the individual perceptions. survey questionnaire was distributed to 53 government utilities and 357 cases were used in the analysis. Structural Equation Modeling AMOS 18 was used for the analysis of the proposed model, from a total 14 hypothesis, 11 were supported and three hypothesis were rejected. This study provided empirical evidence for the effects of new technology determinants in the government sector. In particular, it has successfully revealed that organization culture, government support, subjective norm, top management support and information quality are important determinants in influencing the adoption of technologies. The findings confirmed the theory of TAM and showed its potential capability in the Middle East, particularly in Yemen.

Keywords: Technology Acceptance Model, National Culture, Government Sector, Structural Equation Modeling, Yemen.

Kata kunci: Model Penerimaan Teknologi, Kebudayaan Kebangsaan, Sektor Kerajaan Structural Equation Modeling, Yaman
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<td>IT</td>
<td>Information technology</td>
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<tr>
<td>YR</td>
<td>The Yemeni Rial</td>
</tr>
<tr>
<td>CIA</td>
<td>The Central Intelligence Agency</td>
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<tr>
<td>ICT</td>
<td>Information and communication technology</td>
</tr>
<tr>
<td>USA</td>
<td>United state of america</td>
</tr>
<tr>
<td>PC</td>
<td>Personal Computer</td>
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<tr>
<td>UTAUT</td>
<td>Unified theory of acceptance and use of technology</td>
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<tr>
<td>TAM</td>
<td>Technology Acceptance Model</td>
</tr>
<tr>
<td>BEA</td>
<td>Bureau of Economic Analysis</td>
</tr>
<tr>
<td>OCAM</td>
<td>Office, Computing and Accounting machinery</td>
</tr>
<tr>
<td>IPE</td>
<td>Information Processing Equipment</td>
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<tr>
<td>ERP</td>
<td>Enterprise resource planning</td>
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<tr>
<td>CSE</td>
<td>Computer self-efficacy</td>
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<tr>
<td>GCSE</td>
<td>General computer self-efficacy</td>
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<tr>
<td>SCSE</td>
<td>System computer self-efficacy</td>
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<tr>
<td>IS</td>
<td>Information system</td>
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<tr>
<td>EMR</td>
<td>Electronic Medical Record System</td>
</tr>
<tr>
<td>SN</td>
<td>Subjective norm</td>
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<tr>
<td>WebCT</td>
<td>Web communicate technology</td>
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<tr>
<td>POLNET</td>
<td>Police office intranet</td>
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<tr>
<td>TPB</td>
<td>Theory of planned behavior</td>
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<td>TRA</td>
<td>Theory of reasoned action</td>
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<tr>
<td>TMS</td>
<td>Top management support</td>
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<tr>
<td>UNESCO</td>
<td>United Nations educational, Scientific and Cultural organization</td>
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<tr>
<td>CEO</td>
<td>Chief executive officer</td>
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SEM Structural Equation Modeling
AMOS Aviation maintenance, repair, and operations system
GLS Generalized list square
OLS Ordinary list square
MDIL Maximum likelihood
DF Degree of freedom
Sig Significant
KMO Kaiser-Meyer-Olkin Measure of Sampling Adequacy
AVE Average Variance Extracted
X^2/df Minimum Discrepancy CMIN / Degree Of Freedom DF
GFI Goodness of Fit
AGFI Adjusted Goodness of Fit index
NFI Normed Fit Index
TLI The Tucker-Lewis index
RFI The relative fit index
RMSEA Root Mean Square Error of Approximation
Cult8 Culture 8
Cult15 Culture 15
Cult17 Culture 17
Cult23 Culture 23
Cult25 Culture 25
Cult28 Culture 28
Top1 Top management support 1
Top2 Top management support 2
Top4 Top management support 4
Top6 Top management support 6
Top7 Top management support 7
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<tr>
<td>NNFI</td>
<td>Non-Normed Fit Index</td>
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<tr>
<td>NFI</td>
<td>Normed Fit Index</td>
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<tr>
<td>RMR</td>
<td>Root Mean Square Residual</td>
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<td>ECVI</td>
<td>The expected cross-validation index</td>
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<td>p</td>
<td>probability</td>
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<tr>
<td>Y</td>
<td>Estimated value</td>
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<tr>
<td>T-value</td>
<td>Test value</td>
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<tr>
<td>EASE</td>
<td>Ease of use</td>
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<td>Useful</td>
<td>Usefulness</td>
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<td>Intention</td>
<td>Intention behavior to use</td>
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<td>BI</td>
<td>Intention behavior to use</td>
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<tr>
<td>Norm’s</td>
<td>Subjective norm</td>
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<tr>
<td>Quality</td>
<td>Information quality</td>
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CHAPTER ONE
INTRODUCTION

1.0 Introduction

Countries and governments try to develop and extend their business and economies throughout the world by building relations and agreements. Enhancing trade relations between countries and governments is possible with the application of information technology. The spread of information technology (IT) across the globe is unstoppable because of the benefits it offers. Many organizations are willing to invest huge sums of money on information technology to support different strategic and operational objectives for the purpose of gaining competitive advantage (Venkatesh, Morris, Davis, & Davis, 2003).

From the government point of view, the advent of IT is beneficial as it does not only allow ease of communication with the rest of the world, but it also enables the government to offer better quality services to the general public. The use of IT in government agencies marks the establishment of e-government. But unfortunately, acquiring appropriate IT is not a sufficient condition for utilizing it effectively. Equally important is the acceptance of the government employees of the new technology (Traunmuller & Lenk, 2002).
The contents of the thesis is for internal user only
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