A MODIFICATION OF THE UNIFIED THEORY OF
ACCEPTANCE AND USE OF TECHNOLOGY (UTAUT) FROM
USERS’ PERSPECTIVES OF TELECENTRE IN NIGERIA

ABDULWAHAB LAWAN

DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
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**Abstrak**


**Kata kunci:** Jurang digital, Telekomunikasi, Niat gelagat, Pemodelan persamaan berstruktur
Abstract

Telecentres are physical space that provides public access to information and communication technology to some members of underserved communities. Recent studies have shown that the initiative is spreading among developing countries. A telecentre offers cost-effective means of bridging access to Computer and Internet. Identifying the factors that influence its acceptance represents a fundamental challenge to its successful implementation. Primarily, among numerous benefits of telecentres include digital literacy and employment generation. However, despite these benefits limited studies have been conducted to examine its acceptance in Nigeria. Moreover, it is doubtful whether prior information technology acceptance models can be effectively used to examine its acceptance. Questions also arise if there are other factors that influence its acceptance. The objective of this study was to determine the factors that influence the acceptance of telecentres based on the Unified Theory of Acceptance and the Use of Technology (UTAUT). The proposed model of telecentre acceptance consists of nine latent variables, namely, seven exogenous variables and two endogenous variables. A total of 375 questionnaires were distributed through a survey to respondents in six telecentres located in the three zones in Nigeria, out of which 203 questionnaires were returned, representing 54% response rate. A Structural Equation Modelling was used to investigate the causal and moderating relationships between the latent variables. The results showed four core determinants of Performance Expectancy, Social Influence, Management Effectiveness and Program Effectiveness significantly influence intention towards telecentre acceptance. Two core determinants, Behavioural Intention and Facilitating Conditions, were found to significantly determine User Acceptance. Gender, age and ethnicity were found to moderate the relationships between the latent variables. Based on the result obtained, a model of acceptance known as a modified UTAUT based telecentre model is proposed. The findings have implications both for future research and practice of telecentre development and implementation.

Keywords: Digital divide, Telecommunication, Behavioral intention, Structural equation modeling
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# Table of Contents

Permission to Use .............................................................................................................. i
Abstrak .............................................................................................................................. ii
Abstract .................................................................................................................................. iii
Acknowledgement ................................................................................................................ iv
Table of Contents .................................................................................................................. v
List of Tables ........................................................................................................................ ix
List of Figures ........................................................................................................................ x
List of Appendices ............................................................................................................... xi
Glossary of Terms ............................................................................................................... xii
List of Abbreviations .......................................................................................................... xii

## CHAPTER ONE  INTRODUCTION .................................................................................. 1

1.1 Background of the Study Context ............................................................................. 1
1.2 Problem Statement .................................................................................................... 7
1.3 Research Question and Research Objectives .......................................................... 12
1.5 The Scope of the Research ...................................................................................... 13
1.6 Significance of the study ......................................................................................... 15
1.7 The Thesis Structure.................................................................................................. 18

## CHAPTER TWO  LITERATURE REVIEW .................................................................. 20

2.1 Introduction .................................................................................................................. 20
2.2 Role of Telecentre in Community Access .................................................................. 20
2.3 Reviews on TelecentresA .......................................................................................... 23
2.4 Telecentre Implementation in Nigeria ......................................................................... 32
2.5 Development of Information and Communication Technology in Nigeria ............ 35
2.6 Status of Telecommunication Infrastructure and Access ........................................ 37
2.7 Internet Services ......................................................................................................... 39
2.8 Nigeria Communication Commissions ....................................................................... 41
2.8.1 National Information Technology Development Agency ................................... 42
2.8.2 Information Technology Policies in Nigerian Education System ....................... 42
2.8.3 Digital Bridge Institute .......................................................................................... 44
2.8.4 Universal Service Provision Fund .......................................................................... 45
2.8.5 USPF Board and Sources of Fund ......................................................................... 46
2.9 Effectiveness of Telecentre ....................................................................................... 46
2.10 Information Technology Acceptance ......................................................................... 48
3.8 Types of Questionnaire .................................................................................. 104
  3.8.1 Rating Scales for the Response ................................................................. 105
  3.8.2 Validity and Reliability of the Research Instruments ............................. 105
  3.8.3 Content Validity ....................................................................................... 106
  3.8.4 Pilot Study and Construct Validity .......................................................... 107
3.9 Data Analysis Strategy ................................................................................. 108
  3.9.1 Structural Equation Modeling ................................................................. 109
3.10 Summary ..................................................................................................... 111

CHAPTER FOUR RESEARCH FINDINGS ............................................................. 112
4.1 Introduction ................................................................................................... 112
4.2 Analysis of Survey Response ...................................................................... 112
  4.2.1 Response Rate .......................................................................................... 112
  4.2.2 Descriptive Statistics .............................................................................. 115
  4.2.3 Test of Non-Response Bias ..................................................................... 116
4.3 Data Screening and Preliminary Analysis .................................................... 118
  4.3.1 An Overview ............................................................................................ 118
  4.3.2 Missing Data ........................................................................................... 119
  4.3.3 Assessment and Treatment of Outliers ...................................................... 120
  4.3.4 Assumption of Normality ....................................................................... 120
  4.3.5 Multicollinearity ...................................................................................... 121
  4.3.6 Assumption of Linear Relationship .......................................................... 122
  4.3.7 Assumption of Homoscedasticity ............................................................ 123
4.4 Measurement Refinement ............................................................................ 124
  4.4.1 Exploratory Factor Analysis for Exogenous Variables ......................... 125
  4.4.2 EFA for Endogenous Variables ............................................................... 127
  4.4.3 Confirmatory Factor Analysis (CFA) and the Measurement Model ...... 129
  4.4.4 Exogenous Constructs Measurement Model ........................................... 130
  4.4.5 Endogenous Construct Measurement Model .......................................... 131
  4.4.6 Combine Exogenous and Endogenous Constructs Measurement Model 133
4.5 Convergent Validity Result .......................................................................... 135
  4.5.1 Composite Reliability ............................................................................. 137
  4.5.2 Discriminant Validity ............................................................................. 139
4.6 Main Hypotheses Results ............................................................................ 144
  4.6.1 Gender Grouping Models ........................................................................ 148
  4.6.2 Age Grouping Models ............................................................................ 150
  4.6.3 Ethnicity Grouping Models ..................................................................... 151
List of Tables

Table 1.1 : Internet Usage in Africa and on the Globe 2011  
Table 2.1: Community Telecentres in Nigeria  
Table 2.2: Summary of Telephone Operators in Nigeria  
Table 2.3: Methodological details of TAM Validation  
Table 2.4: Sub-Determinants and Sources of UTAUT External Variables  
Table 3.1: Summary of Factors utilize in the Research Model  
Table 3.2: Codes and Description of Dependent Variables  
Table 3.3: Codes and Description of Independents Variables  
Table 3.4: Research Hypotheses between Independents and Dependents Variables  
Table 3.5: Research Hypotheses among Moderating Variables  
Table 3.6: Distribution of Community Telecentres in Nigeria  
Table 3.7: Number of Registered Users of Community Telecentre in Nigeria  
Table 3.8: Number of Telecentres from each Geographic Zone  
Table 3.9: Proportion of Telecentre Sample with the Corresponding Percentage  
Table 3.10: The Probability Sampling of Users  
Table 3.11: Number of Questionnaire Distributed for each Telecentre  
Table 3.12: Descriptive Statistics of the Constructs and Variables used in the Study  
Table 4.1 : Characteristics of the Respondents (N=191)  
Table 4.2: Descriptive Statistics of the Constructs and Variables used in the Study  
Table 4.3: Test of Non Respondent Bias  
Table 4.4: Correlations among the Variables  
Table 4.5: Correlations between Exogenous Variables  
Table 4.6: Factor Loadings and Communalities for Exogenous Variables  
Table 4.7: Factor Loadings and Communality for Endogenous Variables  
Table 4.8: Goodness of Fit Index for the Exogenous Variables  
Table 4.9: Goodness of Fit Index for the Endogenous Variables  
Table 4.10: Goodness of Fit Index for the Combined Variables  
Table 4.11: Summary of Goodness of Fit Index on Measurement Models (N=191)  
Table 4.12: Convergent Validity on Dimensions  
Table 4.13: Composite Reliability and Cronbach Alpha of Items Remaining  
Table 4.14: Correlation Matrix Roots of the AVEs (shown in diagonal)  
Table 4.15: Summary of GOF for Hypotheses, Alternate, and UTAUT Models  
Table 4.16: Results of SMC2 between Original and Modified UTAUT Model  
Table 4.17: Results of Main Hypotheses  
Table 4.18: Results of Multiple Group Modeling (Gender)  
Table 4.19: Results of Comparative Path Coefficients Gender (Male and Female)  
Table 4.20: Results of Multiple Group Modeling (Age)  
Table 4.21: Results of Comparative Path Coefficients Age (Younger and Older)  
Table 4.22: Results of Multiple Group Modeling (Ethnicity)  
Table 4.23: Results of Comparative Path Coefficients Ethnicity (Major and Minor)  
Table 4.24: Results of Multiple Group Modeling (Location)  
Table 4.25: Results of Comparative Path Coefficients Loc. (Conv. and No.Conv.)  
Table 4.26: Summary of the Hypothesized Results  
Table 6.1: Determinants of User Acceptance of Telecentre  
Table 6.2: Summary of significant Factors with corresponding Beta Values
List of Figures

Figure 1.1: Thesis Structure 19
Figure 2.1: Theory of Reasoned Action TRA (Fishbein & Ajzen, 1975) 50
Figure 2.2: Theory of Planned Behavior TPB (Ajzen, 1991) 51
Figure 2.3: Technology Acceptance Model TAM (Davis, 1989) 54
Figure 2.4: Technology Acceptance Model TAM2 (Venkatesh & Davis, 2000) 55
Figure 2.5: The UTAUT Model (Venkatesh et al., 2003) 61
Figure 2.6: Competing Value Approach Model CVA (Quinn & Rohrbaugh, 1983) 67
Figure 2.7: The Conceptual Model of User Acceptance of Telecentre 74
Figure 3.1: The Research Strategy 78
Figure 3.2: Research Model 81
Figure 4.1: CFA Measurement Model for Exogenous Variables 130
Figure 4.2: CFA Measurement Model for Endogenous Variables 132
Figure 4.3: Combined CFA Measurement Models 133
Figure 4.4: The Hypothesized Structural Model with Path Analyses 141
Figure 4.5: Alternate Model 142
Figure 4.6: Estimated Structural Model 148
Figure 4.7: Gender Models with Path Coefficient (Male and Female) 149
Figure 4.8: Age Group Models with Path coefficient (Younger and Older) 151
Figure 4.9: Ethnicity Models with Path coefficient (Major and Minor) 152
Figure 4.10: Location Models with Path Coefficient (Conv. and Not Conv.) 153
Figure 5.1: Revised Model of User Acceptance of Telecentre 171
# List of Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Research Instruments</td>
<td>211</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Sample Size Table</td>
<td>216</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Results of Statistical Analysis</td>
<td>226</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Construct Reliability</td>
<td>245</td>
</tr>
<tr>
<td>Appendix E</td>
<td>Factor Analysis</td>
<td>250</td>
</tr>
<tr>
<td>Appendix F</td>
<td>Confirmatory Factor Analysis</td>
<td>256</td>
</tr>
<tr>
<td>Appendix G</td>
<td>SEM Output</td>
<td>263</td>
</tr>
</tbody>
</table>
Glossary of Terms

**Universal Service** mean that the entire designated population can privately subscribe to and use a particular telecommunication at a reasonable minimum quality of service at an affordable rate on an individual household or institutional basis (USPF, 2009a).

**Universal Access** signifies that everyone in the community can gain access to a public telecommunication services although not necessarily at homes basis (USPF, 2009a).

**Un-served areas** Geographic areas in which universal coverage for a particular basic USPF service cannot be obtained on demand (USPF, 2009a).

**Underserved areas** Geographic areas, in which there is some coverage of at least 5% for a particular basic USPF service but it cannot be obtained universally (USPF, 2009a).

**Community** literally means a group of interacting people who shares common values attribute with social cohesion, living in a common place within a shared geographical area.

**Sub-Saharan Africa** refers to geographical area of African countries partially situated south of the Sahara, in which the general population is blacks. Arabic commentators in the past referred to this region as *bilād as-sūdān*, literally means land of the black (Edward, 1982).
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGFI</td>
<td>Adjusted Goodness-of-Fit Index</td>
</tr>
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<td>AMOS</td>
<td>Analysis of Moment Structure</td>
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<td>ANX</td>
<td>Anxiety</td>
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<td>AVE</td>
<td>Average Variance Extracted</td>
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<td>BI</td>
<td>Behavioral Intention</td>
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<td>CDMA</td>
<td>Code Division Multiple Access</td>
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<td>CFA</td>
<td>Confirmatory Factor Analysis</td>
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<tr>
<td>CFI</td>
<td>Confirmatory Fit Index</td>
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<td>CCC</td>
<td>Community Communication Centre</td>
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<td>CVA</td>
<td>Competing Value Approach</td>
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<td>DBI</td>
<td>Digital Bridge Institute</td>
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<tr>
<td>DOI</td>
<td>Diffusion of Innovation Theory</td>
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<tr>
<td>DSL</td>
<td>Digital Subscriber Line</td>
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<tr>
<td>EE</td>
<td>Effort Expectancy</td>
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<td>EFA</td>
<td>Exploratory Factor Analysis</td>
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<tr>
<td>ENDO</td>
<td>Endogenous Variable</td>
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<tr>
<td>EXO</td>
<td>Exogenous Variable</td>
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<tr>
<td>FC</td>
<td>Facilitating Condition</td>
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<td>GOF</td>
<td>Goodness-of-Fit</td>
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<td>IFI</td>
<td>Incremental Fit Index</td>
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<tr>
<td>MIS</td>
<td>Management Information System</td>
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<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>ITU</td>
<td>International Telecommunication Union</td>
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<tr>
<td>KMO</td>
<td>Kaiser-Meyer-Olkin</td>
</tr>
<tr>
<td>MEF</td>
<td>Management Effectiveness</td>
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<tr>
<td>NITEL</td>
<td>Nigeria Telecommunication Limited</td>
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<tr>
<td>NPOs</td>
<td>Non-Profit-O rganizations</td>
</tr>
<tr>
<td>PE</td>
<td>Performance Expectancy</td>
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<tr>
<td>PHCN</td>
<td>Power Holding Company of Nigeria</td>
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<tr>
<td>RMSEA</td>
<td>Root Mean Square Error Approximation</td>
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<td>SEM</td>
<td>Structural Equation Modeling</td>
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<tr>
<td>SI</td>
<td>Social Influence</td>
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<td>SPSS</td>
<td>Statistical Package for Social Science</td>
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<td>TAM</td>
<td>Technology Acceptance Model</td>
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<td>TLI</td>
<td>Tucker-Lewis-Index</td>
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<tr>
<td>TRA</td>
<td>Theory of Reasoned Action</td>
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<td>UA</td>
<td>User Acceptance</td>
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<tr>
<td>UTAUT</td>
<td>Unified Theory of Acceptance and Use</td>
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<td>VOIP</td>
<td>Voice Over Internet Protocols</td>
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<tr>
<td>VSAT</td>
<td>Very Small Aperture Terminal</td>
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<tr>
<td>X²/DF</td>
<td>Chi-square per degree of freedom</td>
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</tbody>
</table>
CHAPTER ONE
INTRODUCTION

This chapter presents a brief introduction on Nigeria, the geographical settings and the compositions of its major ethnic groups. The research begins by highlighting the background of the study, the problem statement and the research questions with the research objectives including the scope of the research. The discussions on the rationale of the research and the research structure are presented.

1.1 Background of the Study Context

Nigeria occupies a unique position among African countries located within the West Coast of Africa; it occupies a landmass of about 923,768 square km. The country is bordered by Benin Republic in the West, Gulf of Guinea which forms part of the Atlantic Ocean in the South West, Niger Republic in the North, Chad Republic in the North East and Cameroon Republic in the East. Nigeria is the most populous, multi religious and ethnically diverse country in Africa, endowed with more than 250 ethnic groups (Aborishade & Munt, 1999). The population of Nigeria was estimated at above 150 million people, most of whom are rural dwellers (Salawu, 2010; Muganda, Bankole & Brown, 2008). The three major zones of Nigeria (North, South West and South East) are divided into 36 states; the states are further sub-divided under six geopolitical zones with a total of 774 local government areas (LGAs). The three main ethnic groups in Nigeria and their compositions include: Hausa/Fulani constituting 29% in the North, the Yoruba’s mainly in the South West constitutes 21%, while the Igbo’s in the South East represent 18%. Other minorities groups constituting about 32% could be found
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REFERENCES


207


