TEACHING AND LEARNING WITH TECHNOLOGY: EFFECTIVENESS OF ICT INTERGRATION IN HIGHER EDUCATION

SPECIAL REFERENCE TO EASTERN UNIVERSITY, SRI LANKA AND SOUTH EASTERN UNIVERSITY, SRI LANKA

LIBRARY
16 OCT 2020
EUSL SRI LANKA

By:

JAYASOORIYA MUDIYANSELAGE APPUHAMIGE NIRASH RASHMIKA RAVINATH

Reg. No: EU/IS/2014/MS/76

Index No: MS - 1726

FCM2321
Project Report
Library - EUSL

A project report submitted to the Faculty of Commerce and Management, Eastern University, Sri Lanka, as a partial fulfillment of the requirement for the Degree of Bachelor of Business Administration (BBA)

DEPARTMENT OF MANAGEMENT

FACULTY OF COMMERCE AND MANAGEMENT

EASTERN UNIVERSITY, SRI LANKA

2019

ABSTRACT

The study investigate the Attitudes, Behavioral Control, Self-efficacy and Ease of Use on ICT adoption in higher education. There is so far lack of research has been conducted concerning the attitudes, behavioral control, self-efficacy and ease of use on ICT adoption in higher education. This research study plan to examine that problem and fulfill the empirical gap in lecturers' and students' in higher education.

The aim of the present research is to investigate the effectiveness of ICT integration in higher education; teaching and learning. More precisely, the study focused on evaluating the effect of selected variable on effectiveness of ICT integration based on theory of planned behavior and technology acceptance model as predictors of ICT integration in higher education namely; Attitudes, Behavioral Control, Self-efficacy and Ease of Use. Primary data were collected via questionnaire. Structure questionnaire were distribute among 200 lecturers' and 390 students' were selected out of two universities; Eastern University, Sri Lanka and South Eastern University Sri Lanka in Eastern province Sri Lanka through convenience sampling. The data were analyzed by using descriptive, correlation analysis and multiple regression analysis.

The result shows that attitudes, behavioral control, self-efficacy and ease of use level is high among lectures' and students'. The study reveals that there is moderate relationship between attitudes of lecturers' and ICT adoption, self-efficacy of lecturers' and ICT adoption and ease of use of lecturers' and ICT adoption and also there is a high relationship between attitudes of students' and ICT adoption, behavioral control of students' and ICT adoption, self-efficacy of students' and ICT adoption, ease of use of students' and ICT adoption and behavioral control of lecturers' and ICT adoption. There is a significant impact of attitudes, behavioral control, self-efficacy and ease of use on ICT adoption. Hence it can be concluded that attitudes, behavioral control, self-efficacy and ease of use are some of the factors that enhance effectiveness of ICT integration in higher education in teaching and learning. Process hence the significant factors considers were most important and critical to enhance the effectiveness of ICT integration higher education; teaching and learning.

Key words: Attitudes, Behavioral Control, Self-efficacy, Ease of Use and ICT Integration.

Table of Contents

Page No.

ACKNOWLEDGEMENT i

ABSTRACT ii

List of Tables xii

List of Figure xv

ABBRVIATIONS xvi

Chapter 1 1

INTRODUCTION 1

1.1 Background of the Study 1

1.2 Problem Statement / Research Gap 3

1.3 Research Questions 3

1.4 Research Objectives 4

1.5 Significance of the Study 4

1.6 Scope of the Study 5

1.7 Chapter Organization 5

1.8 Chapter Summary 6

Chapter 2 7

LITERATURE REVIEW 7

2.1 Introduction 7

2.2 Information Communication Technology (ICT) 7

2.2.1 Definitions of ICT 8

2.2.3 ICT Integration in Higher Education 9

2.2.3.1 ICT in Teaching and Learning 10

2.2.3.2 ICT in Research 11

2.2.3.4 ICT in Administration 12

2.3 Teaching and Learning with Technology 12

2.4 Theoretical Framework 13

2.4.1 Technology Acceptance Model 13

2.4.2 Theory of Planned Behavior 15

2.5 Attitudes 17

2.6 Behavioral control 18

2.7 Self efficacy 18

2.8 Ease of use 19

2.9 Relationship between Variable 20

2.9.1 Relationship between Attitudes and ICT Integration 20

2.9.2 Relationship between Behavioral Control and ICT Integration 21

2.9.3 Relationship between Self-efficacy and ICT Integration 22

2.9.4 Relationship between Ease of Use and ICT Integration 23

2.10 Chapter summary 24

Chapter-3 25

CONCEPTUALIZATION AND OPERATIONALIZATION 25

3.1 Introduction 25

3.2 Conceptual Framework 25

3.2.1 Theories Adoption of Conceptual Framework 25

3.3 ICT 28

3.4 ICT integration in higher education 29

3.5 Definitions of Variables 30

3.5.1 Attitudes 30

3.5.2 Behavioral control 30

3.5.3 Self-efficacy 30

3.5.4 Ease of use 31

3.6 Operationalization 31

3.7 Operationalization for ICT Integration 34

3.8 Chapter summary 34

Chapter – 4 36

Research Methodology 36

4.1 Introduction with Research Objective 36

4.2 Research Philosophy 37

4.3 Research Approach 37

4.4 Research Strategies 38

4.5 Methodological Choice 38

4.6 Time Horizon 38

4.7 Research Site/ Area Selection 39

4.8 Population of the Study 39

4.9 Sampling Technique/Method 39

4.10 Sampling Framework and Sample Size 40

4.10.1 Sampling size 40

4.10.2 Sampling Framework 40

4.11 Method of Data Collection and Sources 41

4.11.1 Primary Data 42

4.11.2 Secondary Data 42

4.12 Research Instrument 42

4.12.1 The Rational for the Question 42

4.13 Sources of Measurement 43

4.13.1 Method of Measuring the Personal Information 43

4.13.2 Method of Measuring the Research Information 45

4.14 The Pilot Study 45

4.15 Validity and Reliability of Instrument 46

4.16 Unit of Data 46

4.17 Method of Data Analysis 46

4.18 Method of Data Evaluation 47

4.18.1 Univariate Analysis 47

4.18.1.1 Mean 47

4.18.1.2 Standard Deviation 48

4.18.2 Bivariate Analysis 48

4.18.3 Correlate Analysis 49

4.18.4 Simple Regression Analysis 49

4.18.5 The Multiple Regression Analysis 50

4.18.6 Testing Hypotheses 51

4.19 Data Presentation 51

4.20 Ethical Consideration 52

4.21 Chapter Summary 52

Chapter 5 54

DATA PRESENTATION AND ANALYSIS 54

5.1 Introduction 54

5.2 Analysis of Reliability 54

5.3 Data Presentation 55

5.3.1 Data Presentation and Analysis of Personal Information 55

5.3.1.1 University 56

5.3.1.2 Faculty 56

5.3.1.3 Gender 57

5.3.1.4 Civil Status and Year of the Study 57

5.3.1.4.1 Civil Status for Lecturers' 57

5.3.1.4.2 Year of the Study for Students' 58

5.3.1.5 Degree Level and Parents Education Level 58

5.3.1.5.1 Degree Level for Lecturers' 58

5.3.1.5.2 Parents Education Level for Students' 59

5.3.1.6 Income Level and Parents Income Level 59

5.3.1.6.1 Income Level for Lecturers' 59

5.3.1.6.2 Parents Income Level for Students' 60

5.3.2 Data Presentation and Analysis of Research Information 60

5.3.2.1 The First Objective of the Study 61

5.3.2.1.1 Identify the Level of Attitudes on Adoption in Eastern University and South Eastern University 61

5.3.2.1.2 Identify the Level of Behavioral control on Adoption in Eastern University and South Eastern University 62

5.3.2.1.3 Identify the Level of Self-efficacy on Adoption in Eastern University and South Eastern University 63

5.3.2.1.4 Identify the Level of Ease of use on Adoption in Eastern University and South Eastern University 64

5.3.2.2 The Second Objective of the Study 65

5.3.2.2.1 Relationship between the Attitudes and ICT Adoption 65

5.3.2.2.2 Relationship between the Behavioral control and ICT Adoption . 65

5.3.2.2.3 Relationship between the Self-efficacy and ICT Adoption 66

5.3.2.2.4 Relationship between the Ease of use and ICT Adoption 66

5.3.2.3 The Third Objective of the Study 67

5.4 Testing Hypotheses 71

5.4.1 Testing Hypotheses 1 71

5.4.2 Testing Hypotheses 2 71

5.4.3 Testing Hypotheses 3 71

5.4.4 Testing Hypotheses 4 71

5.4.5 Testing Hypotheses 5 72

5.4.6 Testing Hypotheses 6 72

5.4.7 Testing Hypotheses 7 72

5.4.8 Testing Hypotheses 8 73

5.5 Chapter Summary 73

Chapter 6 74

DISCUSSION 74

6.1 Introduction 74

6.2 Discussion of Personal Information 74

6.2.1 University 74

6.2.2 Faculty 75

6.2.3 Gender 75

6.2.4 Civil Status and Year of Study 75

6.2.4.1 Civil Status 75

6.2.4.2 Year of Study 75

6.2.5 Degree Level and Parent Education Level 76

6.2.5.1 Degree Level 76

6.2.5.2 Parent Education Level 76

6.2.6 Income Level and Parent Income Level 76

6.2.6.1 Income Level 76

6.2.6.2 Parent Income Level 76

6.3 Discussion of Research Information 77

6.3.1 Discussion for Objective One 77

6.3.1.1 Level of Attitudes 77

6.3.1.2 Level of Behavioral Control 78

6.3.1.3 Level of Self-efficacy 78

6.3.1.4 Level of Ease of Use 79

6.3.3 Discussion for Objective Two 80

6.3.3.1 Relationship between Attitudes and ICT Adoption 80

6.3.3.2 Relationship between Behavioral Control and ICT Adoption 81

6.3.3.3 Relationship between Self-efficacy and ICT Adoption 83

6.3.3.4 Relationship between Ease of Use and ICT Adoption 84

6.3.4 Discussion for Objective Three 85

6.3.4.1 Attitudes 85

6.3.4.2 Behavioral Control 87

6.3.4.3 Self-efficacy 88

6.3.4.4 Ease of Use 89

6.3.4.5 Findings from Hypothesis Testing 91

6.4 Chapter Summary 91

Chapter 7 92

CONCLUSIONS AND RECOMMENDATIONS 92

7.1 Introduction 92

7.2 Conclusion 92

7.2.1 First Objective 92

7.2.2 Second Objective 93

7.2.3 Third Objective 93

7.3 Recommendations 93

7.3.1 Faculty of Commerce and Management 93

7.3.2 Faculty of Art and Culture 94

7.3.3 Faculty of Science 94

7.3.4 Faculty of Agriculture 95

7.3.5 Faculty of Health Care 95

7.3.6 Faculty of Technology 95

7.3.7 Faculty of Engineering 96

7.4 Limitations of the Study 96

7.5 Directions for Future Study 97

List of References 98

Appendix-1 107

Appendix-2 112

Appandix-3 117