

الآية

قال الله تعالى:

بسم الله الرحمن الرحيم

(إِنَّ الدِّينَ أَمْرٌ وَعَمِلُوا الصَّالِحَاتِ كَانَتْ لَهُمْ جَنَّاتُ الْفِرْدَوْسِ نُزُلًا ﴿١٠٧﴾ خَالِدِينَ فِيهَا لَا

يَايُونَ عَنْهَا أَحَدٌ ﴿١٠٨﴾ قُلْ لَوْ كَانَ الْبُرْجَانَا لَكَلَّمْتِ رَبِّي لَفَدَّ الْبُرْجَانَا أَنْ

تَفَدَّ كَلَّمْتِ رَبِّي وَلَوْ جِئْنَا بِمِثْلِهِ مَنَّا ﴿١٠٩﴾ قُلْ إِنَّمَا أَنَا بَشَرٌ مِثْلُكُمْ يُوحَىٰ إِلَيَّ أَنَّمَا

إِلَهُكُمْ إِلَهٌُ وَاحِدٌ فَمَنْ كَانَ يَرْجُوا لِقَاءَ رَبِّهِ فَلْيَعْلَمْ عَلًّا صَالِحًا وَلَا يُشْرِكْ بِعِبَادَةِ رَبِّهِ أَحَدًا

﴿١١٠﴾



الكهف (108 - 110)

Dedication

This research is dedicated to my father, who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my mother, who taught me that even the largest task can be accomplished if it is done one step at a time.

This research would be incomplete without a mention of the support given me by my cherished, Omar, to whom this research is dedicated. He was my own "soul out of my soul," who kept my spirits up when the muses failed me. Without his lifting me up when this research seemed interminable, I doubt it should ever have been completed.

For my family members who have inspired me. Their joy in others and inability to see difference as something that is wrong along with their desire to love and be loved touches my heart. Thank you for not only being my little family, but also my friends and to my friends too.

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المستخلص

هذا البحث بعنوان إدارة مشاريع تكنولوجيا المعلومات والاتصالات نظرياً وعملياً يلخص مشكلة وجود فجوة بين نظرية إدارة مشاريع تكنولوجيا المعلومات والاتصالات وتطبيقها بينما يهدف البحث الي تقليل هذه الفجوة وتسليم مشروع ناجح وأهميته تتمثل في مناقشة مشاكل صناعة تكنولوجيا المعلومات والاتصالات مثل الفشل والتسليم المتأخر وتجاوز التكاليف. وفي هذا البحث سنتم مناقشة مفاهيم إدارة مشاريع تكنولوجيا المعلومات والاتصالات كما يتم تطوير دراسة حالة كمقياس مشترك لقياس الأداء وإثبات فرضيات البحث والمتمثلة في وجود فجوة بين نظرية إدارة مشاريع تكنولوجيا المعلومات والاتصالات وتطبيقها ،التأثير الإيجابي لمشاركة أصحاب المصلحة على المشروع وأداء البرنامج ،التأثير الإيجابي أو السلبي لهيكل المنظمة المسؤولة عن المشروع وختاماً يقدم البحث مبادئ إستخدام أحدث الأدوات والتقنيات التي تهدف إلى خلق مشروع ناجح.

هذا البحث يعطي مقدمة لإدارة مشاريع تكنولوجيا المعلومات والاتصالات المخصصة للاستخدام من قبل مديري البرامج الحكومية و مديري برامج مشاريع صناعة تكنولوجيا المعلومات والاتصالات وموظفي كل منهما. ويوفر مجموعة من الضوابط أو التعليمات التي يحتاج مديري المشاريع الي التعامل معها بكفاءة ، وكذلك يسلط الضوء على عدد قليل من المعايير المشتركة للمساعدة على إدارة المشروع. بما أن المشاريع تؤخذ بصورة عابرة، لذلك من المهم التخطيط لها منذ البداية ، ووضع استراتيجيات خروج المشروع واستدامتها بعد انتهاء المشروع. المبادئ والقضايا التي تسهم في نجاح المشروع واستدامته تناقش بإيجاز.

هذا البحث يوضح الخطوط العريضة للقضايا العامة التي ينطوي عليها إنشاء مثل هذا النظام مع الأخذ في الاعتبار القدرة والأداء المتوقع في المستقبل من إدارة المشاريع لتكنولوجيا المعلومات والاتصالات. كما يوضح أيضا إدارة مشاريع تكنولوجيا المعلومات والاتصالات نظرياً وتطبيقياً لتقليل الفجوة بين شطري البحث ، وتعزيز الأداء وحل المشكلات.

Abstract

This research titled Information and Communication Technology Projects Management in Theory and Practice summarizes the problem on the gap between the theory of ICT projects management and its practice. While the research aims to reduce this gap and deliver a successful project and its importance is to discuss the ICT industry problems such as Failures, late deliveries and cost overruns. In this research, ICT project management concepts will be discussed. A common case study standard is developed to quantify the performance and prove the research hypotheses of the gap between the theory of ICT projects management and its practice ,the stakeholder participation has a positive impact on project and program performance, an organizational structure addresses the positive or negative impact. Finally, research provides the principles of using the latest tools and techniques intended to create project success.

This research provides an introduction to ICT project management intended for use by government program managers and ICT industry program of project managers and their respective staffs. And provide a set of disciplines or instructions that project managers need to have the competency to deal with, as well as highlight a handful of common standards to aid project management. As projects are transitory undertakings, it is important to plan from the start, the project's exit strategy and its sustainability after the project ends. Principles and issues that contribute to the project's success and sustainability are briefly discussed.

This research outlines the general issues involved in establishing such a system taking into consideration the capability and performance expected from future ICT project management. It also overviews the ICT project management in theory and practice to minimize the gap between the two parts, enhance the performance and problems solving.

Table of Contents

Subject	Page
الآية	I
Dedication	II
Acknowledgements	III
المستخلص	IV
Abstract	V
List of Figures	X
List of Tables	XII
Abbreviation & Acronym	XIV
CHAPTER ONE: INTRODUCTION	1
1.1 Background	2
1.2 Objectives	3
1.3 Problems Statement	3
1.4 Hypotheses	3
1.5 Methodology	4
1.6 Research Outlines	4
1.7 Past Research	5
CHAPTER TWO: ICT projects Management Overview	8
2.1 Project Introduction	9
2.1.1 Project Sequence of Activities	12
2.1.1.1 Unique Activities	13
2.1.1.2 Complex Activities	13
2.1.1.3 Connected Activities	13
2.1.1.4 One Goal	14
2.1.1.5 Specified Time	14
2.1.1.6 Project Budget	14
2.1.1.7 According to Specification	15
2.2 Project Characteristics	15
2.3 Project Parameters	16
2.3.1 Scope	16
2.3.2 Quality	17
2.3.3 Cost	17
2.3.4 Time	18
2.3.5 Resources	19
2.4 Project Classification	19

2.4.1 Classification by Project Characteristics	19
2.4.2 Classification by Project Type	20
2.5 The Project Stakeholders	21
2.6 The Four Phases of a Project	21
2.6.1 Initiation	22
2.6.2 Planning	22
2.6.3 Execution	22
2.6.4 Close Out	23
2.6.5 Progression of Phases	25
2.7 Projects Management	26
2.7.1 Project Management Functions	27
2.7.2 The Challenge of Managing Projects	29
2.7.3 Phases of Project Management	30
2.7.4 Project Management Success	33
CHAPTER THREE: ICT projects Management in Theory	34
3.1 Introduction	35
3.2 Characteristic of a projects Management Theory	38
3.3 Core Project Management theory approaches	39
3.3.1 Directive Project Management approach	39
3.3.2 Participatory Project Management Approach	40
3.4 Roles in Core Project Management theory	42
3.4.1 Project Leader Role	42
3.4.2 Project Team Member Role	42
3.4.3 Sponsor Role	43
3.4.4 Project Customer Role	44
3.4.5 Resource or Functional Manager Role	46
3.5 Approvals in the Project Management Process	47
3.6 Core PM Deliverables Schedule	48
3.6.1 Estimating Staff Effort for Deliverables	48
3.6.2 Creating the Schedule Grid	50
3.6.3 Defining Interdependencies	51
3.6.4 Mapping the Interdependencies	52
3.6.5 The Benefits of the Manual Method	54
3.6.6 Slack Time	55
3.6.7 Identifying the Critical Path	56
3.6.8 Adding Contingency Time	57
3.6.9 Shortening the Schedule	59
3.6.10 Options for Scheduling	60

CHAPTER FOUR: ICT projects Management in Practice	61
4.1 Introduction	62
4.2 ICT Projects Run Complexity Problems	63
4.2.1 Political complexity	63
4.2.2 Organizational complexity	64
4.2.3 Technical complexity	64
4.3 The Project Success Keys	65
4.3.1 Use an Effective Method	65
4.3.2 Invest in Planning	66
4.3.3 Involve the Customer	67
4.3.4 Make It Manageable	68
4.3.5 Develop the Team	68
4.3.6 Communicate Effectively	70
4.3.7 Learn From Mistakes	71
4.4 Practical case studies	71
4.4.1 Royal Caribbean Cruises: Microstrategies	71
4.4.2 Artesia BC: Flexible Balanced Scorecard	72
4.4.3 Safeco: Aligning IT and Business Architectures	74
4.4.4 Toyota Motor Sales USA: Flexible IT Architecture	75
4.4.4.1 The Architecture Committee	75
4.4.4.2 Flexible IT Architecture	76
4.4.5 BMC Software: Aligning Asset Management	76
4.4.6 Siemens Building Technologies, Inc: Automating Resource Management	77
4.4.7 KM at Five Companies	78
4.4.8 CitiGroup: IT PPM Software	80
CHAPTER Five: Case Study	83
5.1 Institutions and Companies Background	84
5.1.1 National Telecommunication Corporation	84
5.1.1.1 NTC Services	84
5.1.1.2 NTC Projects	85
5.1.2 Greater Nile Petroleum Oil Company (GNPOC)	86
5.1.2.1 GNPOC Projects	87
5.1.3 MTN Sudan	87
5.1.3.1 MTN Projects	87
5.1.4 Zain Sudan	88
5.1.4.1 Zain Services	89
5.1.5 Sudan Telecommunication Group (SUDATEL)	89

5.1.5.1 Sudatel Sample Project	90
5.1.6 Canar Telecommunication	90
5.1.7 General Sudanese Corporation for Radio and TV Transmission	90
5.1.7.1 The Corporation Objectives	90
5.1.7.2 The Corporation Authorities	91
5.2 Data Analysis and Test of Hypotheses	91
5.2.1 Society and Sample of the Study	92
5.2.2 Coding	92
5.2.3 Statistical Analysis Style	93
5.2.4 Test of Hypotheses	96
5.2.4.1 First Hypothesis Test	96
5.2.4.2 Second Hypothesis Test	103
5.2.4.3 Third Hypothesis Test	109
5.2.4.4 Cross-tabulation	116
5.2.4.4.1 Institute or company *first hypothesis Cross-tabulation	116
5.2.4.4.2 Institute or company * second hypothesis Cross-tabulation	117
5.2.4.4.3 Institute or company * third hypothesis Cross-tabulation	118
5.2.4.4 Mean, STD Deviation and Coefficient of variation	119
5.2.4.5 Chi -square, Degree of freedom and Asymptotic Significance	121
CHAPTER SIX: Conclusion	124
6.1 Findings	125
6.2 Recommendations	125

List of Figures

Figure	Page
2.1 The Four Phases of a Project.	24
2.2 Illustration of expenditures vs. phases.	26
2.3 the Project Management life cycle	32
3.1 Directive style of communication.	40
3.2 Participative style of communication.	41
3.3 Deliverables self-stick note.	50
3.4 Schedule grid.	51
3.5 Predecessors and successors.	51
3.6 Calculating delivery dates.	53
3.7 The deliverables schedule.	54
3.8 The Gantt chart.	55
3.9 Slack time.	56
3.10 Identifying the critical path.	57
5.1 Frequencies of the answers of sample members to the first statement of the first hypothesis	96
5.2 Frequencies of the answers of sample members to the second statement of the first hypothesis	97
5.3 Frequencies of the answers of sample members to the third statement of the first hypothesis	98
5.4 Frequencies of the answers of sample members to the fourth statement of the first hypothesis	99
5.5 Frequencies of the answers of sample members to the fifth statement of the first hypothesis	100
5.6 Frequencies of the answers of sample members to the sixth statement of the first hypothesis	101
5.7 Frequencies of the answers of sample members to the seventh statement of the first hypothesis	102
5.8 Frequencies of the answers of sample members to the first statement of the second hypothesis	103
5.9 Frequencies of the answers of sample members to the second statement of the second hypothesis	104
5.10 Frequencies of the answers of sample members to the third statement of the second hypothesis	105
5.11 Frequencies of the answers of sample members to the fourth statement of the second hypothesis	106

5.12 Frequencies of the answers of sample members to the fifth statement of the second hypothesis	107
5.13 Frequencies of the answers of sample members to the sixth statement of the second hypothesis	108
5.14 Frequencies of the answers of sample members to the first statement of the third hypothesis	109
5.15 Frequencies of the answers of sample members to the second statement of the third hypothesis	110
5.16 Frequencies of the answers of sample members to the third statement of the third hypothesis	111
5.17 Frequencies of the answers of sample members to the fourth statement of the third hypothesis	112
5.18 Frequencies of the answers of sample members to the fifth statement of the third hypothesis	113
5.19 Frequencies of the answers of sample members to the sixth statement of the third hypothesis	114
5.20 Frequencies of the answers of sample members to the seventh statement of the third hypothesis	115
5.21 Institute or company * Is there a gap between project plan and it's execution bar chart	116
5.22 Institute or company * Do you think the impact of stakeholder participation effects on the success of the project bar chart	117
5.23 Institute or company * Is Organizational development department provides the foundation for team development bar chart	118

List of Tables

Table	Page
2.1 The Four Phases of a Project	23
3.1 Gate Approvals	47
4.1 ICT Project Types and Abbreviations	62
5.1 Projects executed by the universal access service fund for the year 2010	86
5.2 Likert Scale Distribution	93
5.3 Frequencies of the answers of sample members to the first statement of the first hypothesis	96
Table 5.4 Frequencies of the answers of sample members to the second statement of the first hypothesis	97
Table 5.5 Frequencies of the answers of sample members to the third statement of the first hypothesis	98
Table 5.6 Frequencies of the answers of sample members to the fourth statement of the first hypothesis	99
Table 5.7 Frequencies of the answers of sample members to the fifth statement of the first hypothesis	100
Table 5.8 Frequencies of the answers of sample members to the sixth statement of the first hypothesis	101
Table 5.9 Frequencies of the answers of sample members to the seventh statement of the first hypothesis	102
Table 5.10 Frequencies of the answers of sample members to the first statement of the second hypothesis	103
Table 5.11 Frequencies of the answers of sample members to the second statement of the second hypothesis	104
Table 5.12 Frequencies of the answers of sample members to the third statement of the second hypothesis	105
Table 5.13 Frequencies of the answers of sample members to the fourth statement of the second hypothesis	106
Table 5.14 Frequencies of the answers of sample members to the fifth statement of the second hypothesis	107
Table 5.15 Frequencies of the answers of sample members to the sixth statement of the second hypothesis	108

Table 5.16 Frequencies of the answers of sample members to the first statement of the third hypothesis	109
Table 5.17 Frequencies of the answers of sample members to the second statement of the third hypothesis	110
Table 5.18 Frequencies of the answers of sample members to the third statement of the third hypothesis	111
Table 5.19 Frequencies of the answers of sample members to the fourth statement of the third hypothesis	112
Table 5.20 Frequencies of the answers of sample members to the fifth statement of the third hypothesis	113
Table 5.21 Frequencies of the answers of sample members to the sixth statement of the third hypothesis	114
Table 5.22 Frequencies of the answers of sample members to the seventh statement of the third hypothesis	115
Table 5.23 Institute or company * Is there a gap between project plan and it's execution cross-tabulation	116
Table 5.24 Institute or company * Do you think the impact of stakeholder participation effects on the success of the project cross-tabulation	117
Table 5.25 Institute or company * Is Organizational development department provides the foundation for team development cross-tabulation	118
Table 5.26 Statement and Hypotheses Mean, STD Deviation and Coefficient of variation	119
Table 5.27 Statements Chi -square, Degree of freedom and asymptotic significance	121

Abbreviations and Acronym

A	
ACADEMY	Academy of ICT Essentials for Government Leaders
ADC	Aid to Dependent Children
APCICT	Asian and Pacific Training Centre for Information and Communication Technology for Development
C	
CDMA	Code Division Multiple Access
CEO	Chief Executive Officer
CIO	Chief Information Officer
CMMI	Capability Maturity Model Integration
CONV	Data Conversion Project
CUST	Customer Specific New Development Project
D	
DF	Degree of Freedom
E	
EASSy	Eastern Africa Submarine cable System
F	
FD	Final Deliverable
FDA	Federal Drug Administration
G	
GCIB	Global Corporate and Investment Banking
GNPOC	Greater Nile Petroleum Oil Company
GSM	Global System for Mobile
I	
IT	Information Technology
IT PMO	Information Technology Project Management Office
IT PPM	Information Technology Project Portfolio Management
ICT	Information and Communication Technology
ICTD	Information and Communication Technology For Development
ID	Interim Deliverable
INTG	Software Integration Development Project
IRR	Internal Rate Of Return
ISO/IEC	International Organization for Standardization/International Electro-technical Commission.
K	

KM	Knowledge Management
KPIs	Key Performance Indicators
M	
MIS/DSS	Management Information Systems / Decision Support Systems
Mystic	My Systems And Technology Information Center
N	
NGN	Next Generation Network
NPV	Net Present Value
NTC	National Telecommunication Corporation
P	
PACK	Package Software Configuration Project
PM	Project Management
PPM	Project Portfolio Management
PROD	Software Product New Development Project
R	
ROI	Return On Investment
S	
SERV	ICT Service Development Project
SME's	Small And Medium Enterprises
SPICE	Software Process Improvement Capability dEtermination by ISO/IEC
SPSS	Statistical Package for Social Science
STD	standard deviation
SUDATEL	Sudan Telecommunication Group
SUDIA	Sudanese Development Initiative
T	
TV	Television
U	
US \$	United States Dollar
V	
VERS	Software version enhancement project
W	
WLL	Wireless Loop