

LEADING CHANGE AND INNOVATION IN HIGHER
EDUCATION: A CASE STUDY OF OPEN AND
DISTANCE LEARNING INSTITUTION IN NIGERIA

BY

AKINTOLA ISMAILA AKINBODE

A dissertation submitted in fulfilment of the requirement for
the degree of Doctor of Philosophy in Education

Kulliyyah of Education
International Islamic University Malaysia

JANUARY 2021

ABSTRACT

This research investigated how change initiatives and technological innovation are being initiated and implemented in Higher Education Institutions with special reference to Open and Distance Learning (ODL) institution and a case study of National Open University of Nigeria (NOUN). The institution is a federal Open and Distance Learning (ODL) institution in Nigeria which provides educational access to teeming youths and adults across the country. The study adopted qualitative approach to explore change initiatives recently implemented in the institution. The research also investigated the strategies adopted by the educational leaders of National Open University of Nigeria to implement the recent technological innovation and challenges faced during the implementation process. Eight participants which included administrators, centre coordinators, ICT experts, and lecturers were purposely selected for interview, while focus group discussion was conducted with ten students from various levels of the study in the institution. Documents analysis was adopted in conjunction with the interview to compare and contrast the data collected. Thematic method was used to analyse the data. The study revealed that the recent change initiatives in Open and Distance Learning Institution cut across different areas such as technology tools modification, course modification (OER, MOCC), staff development and shifting to internal data management. The reasons identified for various change initiatives included technology explosion, provision of cost effective and quality education, supporting UNESCO initiative of education for all, enabling access to education for all knowledge seekers in the country, most especially youth who do not have the opportunity to be absorbed into the conventional universities, meeting the need of the students and staff, and host of others. The strategies adopted for the change process covered all phases of the implementation process starting from the pre-implementation to post-implementation stage. The challenges faced during the change process include fear of changes, learning institutions and students becoming victims of data management providers, poor understanding of people, strategic issue, data migration challenges and time frame. The study also discovered that there was poor communication during the change process which caused anxiety and resistance; some of the functions of the new LMS were not properly working and students' enquiries through the LMS were not promptly replied. In addition, the study found out that change processes did not sequentially follow classical change theory, Kurt Lewin change theory, but rather moved within the spectrum of classical and contingency models. The recommendations for the present change initiative include upgrading of the new LMS to suit the students' needs, answering the queries posted by students in the LMS urgently, ensuring that all the functions in the LMS are working properly, provision of up-to-date training for the technical teams that are handling the system and ensuring that non-stop orientation and communication are provided for the students and the general public.

خلاصة البحث

يدرس هذا البحث كيفية بدء وتنفيذ مبادرات التغييرات والابتكار التكنولوجي في معهد التعليم العالي، مع إشارة خاصة إلى معهد التعلم المفتوح والتعليم عن بعد (ODL) وقد اختيرت الجامعة الوطنية النيجيرية المفتوحة (NOUN) لدراسة الحالة، وهي مؤسسة فدرالية مفتوحة ومؤسسة التعليم عن بعد (ODL) في نيجيريا، والتي توفر التعليم لعدد غفير من الشباب والكبار في جميع أنحاء البلاد. واستخدمت الدراسة المنهج الكيفي لاستكشاف التغييرات التي أُجريت وطُبِّقت حديثاً في المعهد، مع استظهار الإستراتيجيات التي تبناها قادة الجامعة الوطنية النيجيرية المفتوحة في تطبيق الابتكارات التكنولوجية الحديثة، والتحديات التي وجّهت في مرحلة التطبيق. تم اخيار ثمانية من المشاركين بما فيهم الإداريون، منسقون، خبراء تكنولوجيا المعلومات والاتصالات والمحاضرون لإجراء المقابلة معهم، بينما تم تركيز على المقابلة مع طلاب المعهد من مختلف المستويات الدراسية. تم توظيف التحليل الوثائقي مع المقابلة لمعرفة التباين والتوافق في البيانات التي تم جمعها. كما تم استخدام المنهج الموضوعي لتحليل البيانات. وكشفت الدراسة أن مبادرات التغيير الحديثة التي طُبِّقت في المعهد المفتوح ومعهد التعليم عن بعد - على اختلاف مستوياتها - تتركز على تعديل الأدوات التقنية، وتعديل المقرر التعليمي (OER, MOCC) وتطوير الموظفين، وتحويل إدارة شبكة الجامعة إلى داخلية. وكانت المبررات التي تم تحديدها وراء هذا التغيير المتنوع تشمل توسيع التكنولوجيا، وتوفير التعليم عالي الجودة وفعال لدعم مبادرة اليونيسكو لتوفير التعليم للجميع، تسهيل التعليم لكل الراغبين في تحصيل العلم، خصوصاً لفئة من الشباب الذين ليس لديهم فرصة التحاق بالجامعة التقليدية، تلبية حاجة الطلاب والموظفين والمضيفين الآخرين. وأن الإستراتيجيات المستخدمة في التغيير تشمل جميع مراحل التطبيق؛ بدءاً من مرحلة ما قبل التطبيق، وانتهاءً إلى مرحلة ما بعد التطبيق. أما التحديات التي وجّهت خلال إجراء التغيير تشمل التخويف من التغيير، فأصبحت المؤسسات التعليمية والطلاب ضحايا لمقدمي إدارة البيانات، سوء فهم الناس، قضية استراتيجية، وتحديات تحويل البيانات، والإطار الزمني. وكشفت الدراسة أن هناك عدم الاتصال الجيد خلال إجراءات التغيير والذي سبب القلق والمقاومة، بعض خاصيات نظام إدارة التعلم الجديد (LMS) لا تعمل جيداً، ولم يتم التجاوب لاستفسارات الطلاب خلال نظام إدارة التعلم (LMS) على الفور. ومن ضمن التوصيات على مبادرة التغيير الحالية: تطوير نظام إدارة التعلم بما يتناسب مع حاجة الطلاب، التجاوب الفوري لاستفسارات الطلاب المنشورة في نظام إدارة التعلم، التأكد من أن جميع وظائف نظام إدارة التعلم تعمل بشكل صحيح، تقديم التدريب والتحديث المتواصل

لفريق الإعلام الذين يديرون الشبكة، وكذلك التواصل والتوعية المستمرة للطلاب وللجماهير.

APPROVAL PAGE

The dissertation of Akintola Ismaila Akinbode has been approved by the following:

Azam Othman
Supervisor

Ismail Sheikh Ahmad
Co-Supervisor

Merah Souad
Co-Supervisor

Mohamad Johdi Salleh
Internal Examiner

Omar Abdull Kareem
External Examiner

Ganiyu Godonu Oke
External Examiner

Mohamed Elwathig Saeed Mirghani
Chairman

DECLARATION

I hereby declare that this dissertation is the result of my own investigation, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at the IIUM or other institutions.

Akintola Ismaila Akinbode

Signature.....

Date.....

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

**DECLARATION OF COPYRIGHT AND AFFIRMATION OF
FAIR USE OF UNPUBLISHED RESEARCH**

**LEADING CHANGE AND INNOVATION IN HIGHER
EDUCATION: A CASE STUDY OF OPEN AND DISTANCE
LEARNING INSTITUTION IN NIGERIA**

I declare that the copyright holders of this dissertation are jointly owned by the student and IIUM.

Copyright © 2021 Akintola Ismaila Akinbode and International Islamic University Malaysia. All rights reserved.

No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder except as provided below

1. Any material contained in or derived from this unpublished research may be used by others in their writing with due acknowledgement.
2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.
3. The IIUM library will have the right to make, store in a retrieved system and supply copies of this unpublished research if requested by other universities and research libraries.

By signing this form, I acknowledged that I have read and understand the IIUM Intellectual Property Right and Commercialization policy.

Affirmed by Akintola Ismaila Akinbode

.....
Signature

.....
Date

This dissertation is dedicated to my late parents, wives and children.

ACKNOWLEDGEMENTS

Almighty Allah says:

Did He not find you an orphan and give (you) refuge?

He found you lost and guided (you).

He found you poor and made (you) self-sufficient.

So as for the orphan, do not oppress (him).

As for the beggar, do not repel (him).

As for the favour of your Lord, report (it). (Q 93 vs 6-11)

No word can express my gratitude to My Lord, My Cherisher, My Provider, the One Who continuously gives me succor; wipes my tears; stands with me when all hope is lost and I feel stranded. He is there when no one could stand; I am not alone in times of pains. Every time, He proves to me that He is there for me. *Alhamdulillah*. I thank You My Lord and the only One worthy of worship. You are my Protector and my Friend in this world and Hereafter. Make me die submitting to You and join me with the righteous.

My parents! This is what you longed for when you left no stone unturned to make sure this 'small boy' achieve in life, *Robi irhamuhuma kama robayani sogirah*. Your sweat, efforts, prayers remain evergreen and I believe we shall meet again in the paradise of our Lord.

My able supervisor, Associate Professor Dr. Azam Othman, you are not only an academic mentor but a life mentor. I pray Almighty Allah continue elevating you above equals, increase you in knowledge and wisdom. I equally thank my dissertation committee Professor Dr. Ismail Sheikh Ahmad and Assistant Professor Dr. Merah Souad for their invaluable guidance and contribution.

My great partners, Hadiat Abdu Ganiy and Ganiyah Abdul Hammed! You both deserve a special accolade. A friend in need is a friend indeed. We all passed through the ordeals together, sailed the storm and bore the brunt day and night. I cannot express my gratitude, but my heart bears witness that you are there.

My children, all of you stood with your daddy. I will say to you all that your smile during the lack, your resoluteness during the solitude, your spirit of keep-going when daddy was away, your perseverance when it was tough, your humour and encouragement, your prayer all count to this success and we all did it together. May you all live long and live a fruitful life for our *ummah* and the world at large.

To friends in Nigeria, Malaysia and Saudi Arabia, your support has no equal. Those who supported the family, those who supported intellectually, those who helped in collecting the data, those who supported financially and the prayer warriors are all there. Your names are too numerous to list and your rewards are beyond the typo. I see your names with my Mighty Lord where He rewards you with eternal abode.

I thank my sister, Ummu Aisha. Family members and all who answered my ‘distress calls’, I thank you all. I must acknowledge those men, who guided and helped us here in Malaysia, Dr. Shaffi Bello, Dr. Zakariyah Yusau (Abu Aisha), Barrister Dr Tijani (TJ), Dr. Habeeb (Bature), Dr.Qazeeem (My able Niscom President), Dr Adam Adesina and host of others. All those days counted to this great success. *Jazaakum LLahu khaeran.*

I thank Sheikh, Dr. Sharaff Al Edewi. He did not only stand during those ‘odd’ times, but also did the final proofreading of this work. I remain thankful to you. To those who helped in one way or the other, I thank you and pray Almighty Allah reward you abundantly.

My Lord, I thank You and will continue to express my gratitude to You. Dear Lord, do not leave me to myself. You are the Most Merciful.

TABLE OF CONTENTS

Abstract	ii
Abstract in Arabic.....	iii
Approval Page	v
Declaration	vi
Copyright Page.....	vii
Dedication	viii
Acknowledgements	ix
List of Tables.....	xv
List of Figures	xvi
List of Abbreviations	xvii
CHAPTER ONE: INTRODUCTION	1
1.1 Introduction	1
1.2 Background of the Study	3
1.3 Statement of the Problem.....	8
1.4 Purpose of the Study.....	11
1.5 Research Objectives	12
1.6 Research Questions	13
1.7 Significance of the Study.....	13
1.8 Limitations of the Study	15
1.9 Definition of Terms	15
1.10 Chapter Summary	17
CHAPTER TWO: LITERATURE REVIEW	18
2.1 Introduction.....	18
2.2 The Concept of Change in Higher Education Institution	18
2.3 Managing Change in Higher Education Institution.....	21
2.4 Theories of Change.....	22
2.4.1 Lewin’s Force Field of Change.....	22
2.4.2 Thurley’s Model of Change	26
2.4.3 Jacobsen Model of Change	27
2.4.4 Kotter`s Model of Change	28
2.4.5 Generic Model of Change Management.....	31
2.5 Leadership and Change Management in Higher Education	32
2.6 Open and Distance Learning	35
2.7 Trends of Technology in Open and Distance Learning (ODL)	38
2.8 Meaning of Technology Innovation	47
2.9 Types of Innovation.....	50
2.10 Theories of Innovation	55
2.10.1 Diffusion of Innovation Theory	55
2.10.2 The Teece Theory.....	57
2.10.3 Technology Acceptance Model.....	58
2.10.4 Unified Theory of Acceptance and Use of Technology (UTAUT)	59

2.11 Learning Management System LMS in Open and Distance Learning	60
2.12 Studies on Learning Management System (LMS).....	65
2.13 Factors Influencing Management and Implementation of Technology Implementation	68
2.13.1 Leadership Factor	68
2.13.2 Ethical/Cultural Factor.....	73
2.13.3 Technological Factors	77
2.13.4 Resource Factors	77
2.13.5 Institutional and Pedagogical Factors.....	78
2.14 Resistance to Change	78
2.15 Chapter Summary	84
CHAPTER THREE: RESEARCH METHODOLOGY	85
3.1 Introduction.....	85
3.2 Rationale for Qualitative Approach	85
3.3 Rationale for Case Study	89
3.4 Making arrangement for the real Study	90
3.5 Population of the Study	91
3.6 Sample and Sampling Technique	92
3.7 Instruments of the Study.....	94
3.7.1 Instruments of the Study	94
3.7.2 Document Analysis	95
3.8 Research Procedure	96
3.8.1 Pilot Study.....	96
3.8.2 Credibility and Trustworthiness of the Study	97
3.8.3 Ethical Considerations	99
3.9 Process of Data Collection.....	100
3.9.1 Data Collection in Qualitative Study.....	100
3.9.1.1 Stage 1	100
3.9.1.2 Stage 2.....	101
3.9.1.3 Stage 3.....	102
3.10 Data Analysis	102
3.10.1 Qualitative Data Analysis	102
3.10.1.1 Data Managing.....	103
3.10.1.2 Reading and Memoing	104
3.10.1.3 Describing/Classifying/Interpreting	104
3.10.1.4 Generating Themes	105
3.11 Chapter Summary	106
CHAPTER FOUR: ANALYSIS OF THE DATA	107
4.1 Introduction.....	107
4.2 Research Question 1	108
4.2.1 Tools modification.....	108
4.2.2 Course modification	112
4.2.3 Shifting to Internal Data Management	119
4.3 Research Question 2	121
4.3.1 Pre-Implementation Stage.....	122
4.3.2 Implementation Stage.....	130

4.3.3	Post-Implementation.....	135
4.3.3.1	Sensitization and Communication	135
4.4	Research Question 3	136
4.4.1	Fear of Change	136
4.4.2	Poor understanding of people	138
4.4.3	Strategic issues	138
4.4.4	Migration and hacking challenges.....	139
4.4.5	Time Frame	140
4.5	Research Question 4	141
4.5.1	Government Involvement	142
4.5.2	Deliberate Decision of Stakeholders	143
4.5.3	Development of School Data System.....	144
4.5.4	Provision of Alternatives	145
4.5.5	Consideration of Time	146
4.5.6	Communication	147
4.5.7	Equipping School Manpower.....	148
4.5.8	Considering Human Dimension and Gain	149
4.5.9	Strategic Planning.....	150
4.5.10	Upgrading of the new LMS.....	151
4.6	Conclusion	151
CHAPTER FIVE: DISCUSSION AND CONCLUSION		152
5.1	Introduction.....	152
5.2	Summary of the Findings.....	152
5.2.1	Discussion on Research Question 1	153
5.2.2	Discussion on Research Question 2	164
5.2.3	Discussion on Research Question 3	168
5.2.4	Discussion on Research Question 4	170
5.3	Recommendations	173
5.3.1	Recommendation for the Government	173
5.3.2	Recommendation for Institution Leaders	176
5.3.3	Recommendation for Improvement on the Technological Innovation (LMS).....	177
5.3.4	Recommendation for Future Change Initiatives and Innovations.....	178
5.4	Suggestions for Further Study.....	181
5.5	Conclusion	181
REFERENCES		184
APPENDIX A: REQUEST LETTER 1		199
APPENDIX B: REQUEST LETTER 2.....		200
APPENDIX C: PARTICIPANT INFORMATION SHEET		201
APPENDIX D: CONSENT LETTER		202
APPENDIX E: INTERVIEW QUESTIONS		203

APPENDIX F: INTERVIEW CODING TEMPLATE	208
APPENDIX G: LIST OF DOCUMENTS	215

LIST OF TABLES

<u>Table No.</u>		<u>Page No.</u>
3.1	List of the participants	93
5.1	Federal Government of Nigeria Budgetary Allocation to the Education Sector	174

LIST OF FIGURES

<u>Figure No.</u>		<u>Page No.</u>
2.1	Lewin's force field of change	24
2.2	Kotter's Model of Change	30
2.3	Rothwell (1992) Innovation Process Model	50
2.4	Davis Technology Acceptance Model (TAM)	59
2.5	Scott and Jaffe's Resistance Model	81
2.6	Adams et al., Phases of Change	83

LIST OF ABBREVIATIONS

ASSU	Academic Staff Union of Universities
BMAS	Benchmark Minimum Academic Standards
COL	Commonwealth of Learning
HEI	Higher Education Institution
IIUM	International Islamic University Malaysia
IT	Information Technology
JAMB	Joint Admission Matriculation Board
LMS	Learning Management System
MOOC	Massive Open Online Courses
NOUN	National Open University of Nigeria;
ODL	Open and Distance Learning
OER	Open Educational Resources
SDG	Sustainable Development Goals
UNESCO	United Nations Educational, Scientific and Cultural Organization

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

Higher Education Institutions (HEIs) all over the world are currently confronted with tumultuous environment, which necessitates a consolidated action from the leaders to initiate and implement different change initiatives and innovations, which can concurrently meet the needs and aspirations of the students, in particular, and the society, in general.

Higher Education Institutions (HEIs), being a social entity, must be undaunted by the change revolution if they will remain purposeful and serve the interest of the society. The forces pressurizing higher institutions of learning for change include globalization, technology explosion, upsurge enrolment, international competition, fiscal and budgetary constraints, pressure for accountability, etc. (Abusalim, 2020; Adewole-Odeshi, 2014; Alexander & Manolchev, 2020; Bozkurt et al., 2015; Chandler, 2013)

Reacting to globalization, Higher Education Institutions (HEIs) all over the world have been trying to accommodate international dimensions, which include involvement in international activities, an internationalized curriculum, study exchange programmes, recruitment of international staff etc. (Chang, 2015; OECD, 2011; Salmon, 2014b; Treshchevsky, Igolkin, & Shatalov, 2018). Hence, today nearly all Higher Education Institutions (HEIs) engage in global university rankings.

The flexible nature of social interactions among people today coupled with poor economic downturn also forces the society to disregard the ‘excellent bookish

students' produced by the citadels of learning and, therefore, demand for innovators, problem solvers, team players, collaborators, critical, creative and entrepreneurial students. Thus, Higher Education Institutions (HEIs) are forced to change the curriculum to include the soft skills, non-cognitive skills, collaborative skills and critical thinking skills (Gachino, 2019; Ghofur & Yulianto, 2014; Reimers, 2020; Scoular, 2018; Tait, 2018; Zawacki-richter & Naidu, 2016; Zhao, 2012; Wagner, 2012; Tait & Faulkner, 2016). Higher Education Institutions (HEIs) are as well making new initiatives, such as open learning, virtual universities, Massive Open Online Courses (MOOC), Open Educational Resources (OER) in order to cope with Information, Communication and Technology (ICT) explosion and upsurge enrolment (Daniel, 2012; Don, 2012; Gachino, 2019; Mulà et al., 2017; Salmon, 2014a; Treshchevsky et al., 2018)

As Higher Education Institutions (HEIs) throughout the world engage in different change initiatives and innovations in aspects of teaching-learning, teaching pedagogy, managerial development, curriculum etc., the success of any of these change initiatives depends largely on the leadership acumen governing the institution (Beaudoin, 2015; Chandler, 2013; Chingara & Heystek, 2013; Christie, Simon, & Graham, 2019; Lin, 2004)

A higher education institution is typically characterized as a complex system, organized anarchy or loosely coupled system (Cohen et al., 2009) which is as well surrounded with extreme collegiality, extended dialogue, consensus, and professional expertise. There is, therefore, the need for efficient leaders, who can effectively communicate the desired vision for the change initiatives, showcase managerial skills to offset the barriers and fear, and strategically suppress the formal and informal

resistant power that can waylay the success of the initiatives and innovation (Christie et al., 2019; Mabin, Forgeson, Zealand, & Green, 2014; Sung, Chang, & Liu, 2015).

The study of any change initiative or innovation in higher education institutions in the twenty first century should be dealt with by looking at both sides of the initiatives i.e. the force and the driver. Thus, this study investigates how change initiatives and innovation are initiated and implemented by the leaders of an Open and Distance Learning (ODL) institution.

1.2 BACKGROUND OF THE STUDY

The present century is an era of technology revolution. Socio-economic, political and educational landscapes are being reshaped in line with emerging technologies. Technology adoption and integration have been considered as one of the determinants of the best universities in the world university ranking (Chang, 2015; Lyapina, Sotnikova, Lebedeva, & Makarova, 2019). Technology has also become a non-negotiable factor that drives students to seek admission in a university. For an educational institution to remain competitive in the market and excel in achieving meaningful teaching, learning and research, new technologies have to be fully integrated in the institution (Lyapina et al., 2019; Meskhi, Ponomareva, & Ugnich, 2019)

Distance learning universities are mostly in need of new technologies than their conventional counterpart. This is not only because they deal with students of various demographics, but also the instructors and the students are often physically separated in terms of space and time. Therefore, to reach these diverse students in a more effective manner, provide access to the subject experts and materials, create meaningful interaction between students and instructors and among students

themselves, up-to-date technologies have to be effectively integrated (Jenny Roberts, Roberts, Kigotho, & Stagg, 2018;Stroeva, Tokmakova, Petrukhina, & Polyakova, 2019).

Apart from the need to cater for the students' wide range background in terms of age, culture, social status and educational experience, the recent agitation from the society for creative and critical students also necessitates adoption of new technology that will help in enhancing students' critical thinking and self-paced study in distance learning universities. Likewise, the current consumerist orientation to education, which is driven by marketization and neo-liberalism, has compelled the employers to seek for job-ready and future-proof graduates (lifelong learners). This need can only be fulfilled by the institution if contemporary technologies are adequately utilized (Alexander & Manolchev, 2020; Ferguson et al., 2017; Lyapina et al., 2019; Meskhi et al., 2019)

These irresistible forces of change in conjunction with the new forms of government policy regarding access to education make it pertinent for distance learning universities to engage in technology innovation to extend the scope of their curricula, modify the teaching-learning strategies and upgrade the channel of instruction delivery.

The trends of technology innovation in distance learning institutions differ according to region or country across the world. Technology change initiatives and innovations depend on the rate of aggregate development of a region or country. In Europe, for instance, a recent UK report (Ferguson et al., 2017) identified trends in technology innovation in distance learning institution as:

- Spaced learning, a specific regime to improve retention and understanding;

- Learners making science, pedagogy to develop a more scientific frame of mind amongst learners;
- Open textbooks, exploiting technology and the ‘open’ movement to mix purpose-built texts; and
- Student led-analytics, the development of learning analytics to empower learners.

However, Arab world and Africa are lagging behind Europe, Asia Pacific and North America. The following are the emerging technology trends in the region- E-learning, online learning tools, flipped learning, MOOCs and online courses, Learning Management Systems, education and gamification, mixing and matching digital tools (Abusalim, 2020; Gasaymeh, 2017; Lwoga, 2014; Lyapina et al., 2019; Jennifer Roberts, Kigotho, & Stagg, 2018; Sung et al., 2015)

Basically, majority of African countries are progressively expending e-learning, have identified it as the viable solution to the problem of inaccessibility to higher education facing the region. E-learning is a compounded name synonymously used for web-based learning, internet-based training, blended learning, advanced distributed learning, web-based instruction, networked learning, tele-learning, computer assisted learning, distance learning, virtual learning, online learning and open or flexible learning.

E-learning instruction is delivered via electronic media, internet, intranet, extranets, satellite, broadcast, web 2.0 such as wikis and blogs, social networking such as Ning™, M-learning etc. (Abusalim, 2020; Dahlstrom, Brooks, & Bichsel, 2019; Lyapina et al., 2019; BBonaccorsi, Daraio, & Geuna, 2010; Stroeva et al., 2019).

Advanced technology tool, such as Learning Management System (LMS), has strengthened distance learning or e-learning system by enhancing effective

communication between instructors and students and among students themselves. It helps in facilitating transfer of knowledge and creating flexibility in teaching and learning activities. Thus, learning can take place at any time, any place, any pace and from anyone (Almalki, Al-fleit, & Zafar, 2017; Kasim & Khalid, 2016; Maina & Nzuki, 2015; Nicholas-omoregbe, 2017).

LMS is an avenue for the instructor to create and deliver course contents, monitor student participation, track and assess students' performance. LMS has become second to none in Higher Education Institutions (HEIs) throughout the world. The report of Educause Centre for Analysis and Research in 2014 indicates that 99% of Higher Education Institutions use LMS and this is being used by 85% of faculty and 83% from the students' angle (Dahlstrom, Brooks, & Bichsel, 2014).

Also, the research by Legon and Garret (2017) submits that 81 % of chief online education officers affirm that LMS is the most adopted technology in online education. The study by Kavuta and Nyamanga (2018a), Nicholas-omoregbe (2017), and Rhode, Richter, Gowen, Miller, and Wills (2017) also attest that larger number of students uses LMS and they consider it as the most important instructional technologies needed for academic success.

Therefore, LMS has become an indispensable technology in teaching and learning. Distance learning institutions in Africa have so far been engaging in acquisition, implementation, changing, adoption and utilization of LMS like the one recently done by National Open University of Nigeria.

However, adoption and implementation of any technology innovation, especially, the one related to teaching-learning activities like LMS are very complex processes. If not properly implemented, they can cause a colossal loss for the institution and educational backwardness for the entire nation. Scholars and

researchers in the field of distance learning have vehemently argued that implementation of technology is one of the greatest challenges facing the institution and its leadership in twenty first century (Alexander & Manolchev, 2020; Almalki et al., 2017; Cifuentes, Andes, Vanderlinde, & Researcher, 2015; Lyapina et al., 2019; Mckenna, Baxter, & Hainey, 2017; Meskhi et al., 2019; Bonaccorsi et al., 2010). They claim that this has made the impact of the huge investment in technology a colossal loss and made potential benefits of technology integration a mere mirage. They state further that the poor implementation of technology affects teaching and learning activities, jeopardizes the efforts of the school management and puts their credibility at stake (Baesu & Bejinaru, 2013; Beaudoin, 2015; Cifuentes et al., 2015; Kavuta & Nyamanga, 2018b; Nworie, 2010; Bonaccorsi et al., 2010).

The National Open University of Nigeria has the largest number of students in the nation and the entire African region. Thus, the institution has enormous data to manage in terms of course modules, student registration, examination and online teaching and learning. For effectiveness and efficiency, the institution recently launched and implemented a new LMS. Expectedly, the implementation was not hurdle free; it was rather faced with different challenges. Despite the primacy of the institution in the country, no research has been conducted regarding the LMS implementation in the citadel of learning.

Studying of technology implementation can be approached in two perspectives; technical and social. Studies on technology implementation often focus on technical perspectives, neglecting the social perspective which is the human element. By focusing only on technical aspect, technology innovation is approached as an independent technical change, not as a change management from leadership perspective.