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# **Impact of Changes in Operating Systems of Business-Case Study of Malawi Telecommunication**

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## **1. Introduction of the study**

### *1.1 Introduction*

Most of the limited companies dealing with telecommunication systems pretend to change systems that generally deal with running of its management affairs with the aim fulfilling different strategic management affairs of which often times are the goals and objectives that limited companies may require with the aim of achieving the basic standards towards the management of departmental activities usually in finance and accounting, human resource, marketing, corporate, legal and technical and it is often main aim of this case study under Malawi telecommunication limited to find out and answer the questions as per in the list, identify the potential goals and objectives that often lead to change of systems, ascertain factors that lead to change of systems, narrate the factors that lead to change of systems, assess the impact of frequently changing systems and identification of the potential challenges arising from frequently changing of systems and how they could be overcome. At end this essay is expected to seek clarity or identify the factors as listed of which are intended to be of true and Fairview of why the frequency of changing the operating systems could have an impact in business management of Malawi telecommunication limited of which is under the case study and these factors involves finding the best solutions that meeting clarification leading to change of systems, designing the best alternatives that seeks solutions to basic changing of systems, implementation of the solutions that have been generated as results or finding of the research, enabling the ascertainment of the solutions within Malawi telecommunication limited and the general final assessment arising as a result of change of the operating systems(Berry, Seiders & Crewal:2002)

### *1.2 Motivation for the study*

Malawi telecommunication limited (MTL) as registered limited liability under Malawi registration and incorporation act 1984 has its own policy and strategy that regulates it to change and own business systems at any point in time subject to the approval of board and its management team and often, we have seen the frequent change assessed. Ess, SAP business one and the billing systems from new billing package to which at ability system package managed by the techno tree in India and the porta one billing from researcher to 2023 are developed but till now it has not yet assessed the general impact that arises as a result in frequently changing these business operating systems and the other factor that motivated the researcher to reach the extent of carrying out the research is that nobody has ever shown interest to carry out the research towards impact of changes in business operating systems of Malawi telecommunications limited since 1997.The researcher is motivated as well as outcome of the research will provide information that could be used in determination of ideas that could be regarded as impact leading to frequent changes in operating of systems of other telecommunication limited here in Malawi such as Airtel limited, Telekom networks limited and Access networks limited. Finally, the researcher get motivated as this activity will provide information and knowledge over how these impact towards frequent change of systems in Malawi telecommunications could be overcomes for the benefit of the company, customers, and other potential stakeholders.

### *1.3 Focus for the study*

The study has focused on the impact of the changes in operating systems of the business with case study citing Malawi telecommunications and in addition the study has also focused on assessing the major factors as leading to the changes of operating systems of the business. The other main focus of the study includes but not limited to changes in technology as this could be regarded as the main challenge impacting to changing of operating systems of an organization and the best example could be whereby Malawi telecommunication was moving from ordinary to digital technology, management had to put some measures towards its employees in controlling its data in order to avoid loss of important data that is used in operating the daily activities of the company. The other focus of the study is of identifying the best knowledge and skills that Malawi telecommunication management could engage as the best practices in impacting towards the changes in operating systems of the business. But the main aim is of critically focusing on the factors critically

impacting the changes in the operating systems of the business a generally how could be resolved by the management team of the set business but in this case, we look at Malawi telecommunication limited as our main case study.

#### ***1.4 Problem statement of the study.***

Most of the potential business organization, if they just change the operating systems of the business, turn out to face a lot of business challenges such as cute shortage of literature that could guide the business merchants in the business operations as well as luck of knowledge and capital by those who are in control of the business. These usually leads to high rate of failure of the business launch thence leading to business becoming unsuccessful at all costs. The research works that have been previously conducted in Malawi as of now have not identified the best potential factors leading to the changes in operating systems of the business and although the studies have been fully conducted towards the operating systems, its seems there is still shortage of literature to analyze the impact of change in the operating systems of the business like that of Malawi telecommunication and thence this study is intended or conducted to fill in the gap. The main aim of this study is of identifying and analyzing the principal factors that generally leads to the changes of the business operating systems.

#### ***1.5 Objectives of the study.***

The main objectives of this study,

- 1) Identify the potential skills and objectives that often lead to change in business systems more especially with Malawi telecommunications limited.
- 2) Ascertain the major factors that lead to change in business systems.
- 3) Assess the impact of changing frequently the business operating systems.
- 4) Verifying these major factors and tracing on the way to be corrected for the future Engagements.

#### ***1.6 Research questions.***

The basic research questions are as per below,

- 1) What are the qualities of the good operating systems of the business.
- 2) What are the basic key characteristics of the good business operating system.
- 3) What is the impact arising because of frequently changing business operating systems more especially Malawi telecommunication limited.
- 4) How can these matters arising as result of frequently changing the systems be controlled within the organization.

#### ***1.7 Limitation of the study***

The researcher faced a lot of limitations which included low educational levels of the participants to the extent that participants failed to administer the questionnaire, make an analysis over the data on the questionnaire. The researcher was limited to the way on which a questionnaire could be designed and distributed within priorities so that appropriate information could be gathered, corrected, and distributed to right members.

#### ***1.8 Chapter summary.***

This chapter introduced a study by stating an introduction of the study of which the researcher is interested to which it's the impact of changing the operating systems of a business with case study of Malawi telecommunication limited and thereafter the study introduced a topic that bring in an analysis of the factors that usually focuses on the topic itself and on how those factors could be ascertained for future company developments. The study must therefore focus on the general elements and ideas of the business research, objectives of the research, the statement of the problem, the limitations of the research and ensure that indeed it has finally defined some of the major terms that have been used in the study. The next chapter reviews the literature which is identified duly relevant to the study.

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## **2. LITERATURE REVIEW**

### ***2.1 Introduction***

This chapter contains the related review to the study, and it covers the following definition of the study, the general characteristics of the study, the importance of the study, the challenges, or the impact of the study and finally the chapter summary.

## **2.2 Definition of the study**

The definition of the operating system of business could symbolize the general application that are used to run the management affairs of the company and these management affairs includes the human resource, marketing department, financial department, corporate affairs department, and technical department.

The operating system of an organization could also symbolize the general application of the hardware and software that usually manages the application of the computer hardware and software towards the organization, and it has an impact of being changed within the organization in accordance with the general duties that are being applied within that elementary period.

The operating system could also be defined as general software that acts as an elementary between the user and the hardware and this means that it is a general system that provides an interface between the user and the machine and thence could ensure that there is more knowledge on either how to access or use the machine by the user all the time.

Lastly, the operating system of the business could also be defined as an application that manages all the computer applications. These applications may include the hardware and software components of the computer and the individuals themselves and all these have an impact on the operating system of the business of an organization and it is main duty of this essay to identify these factors and determine on how they could generally affect the business with case studies of Malawi Telecommunication Limited (MTL).

## **2.3 Importance of changes in operating systems of business.**

The operating system of large businesses such as Malawi telecommunication limited of which is the mother of information computer technology (ICT) and telephone services here in Malawi must be changed frequently although there could be some general issues that could necessarily affect the company such as costs incurred in purchasing and installation of the machines, the costs generally incurred in training the staff. This could have an impact on companies in such a way that there could be advancement in technology for Malawi telecommunications limited thence enabling it to boost sales revenues.

This means that changes in operating system of business more especially with Malawi telecommunication could have both positive and negative impacts seen to be of beneficial to Malawi telecommunication itself.

## **2.2 Characteristics of operating systems of business case study-Malawi telecommunication limited.**

The characteristics are major commons that an operating system has to possess in order for telecommunication business to perform well over a period of time and for operating systems of Malawi telecommunication limited to perform well, it requires the machines to run simultaneously, the mutual multitasking of operating systems and allowing the operating system to fair allocation of the process and thence if these characteristic are generally followed, then there might be mutual impact arising over machines towards operations of business and below we will analyses these characteristics and its implications towards operating systems of business in Malawi telecommunications limited.

### **Multitasking**

The first characteristic is that of multitasking. This is the ability of the operating system of the business to perform different functions of the business at a goal. The best example to this operation system is that of SAP business one system that is generally used by Malawi telecommunication limited and with this package if transaction has been posted in commercial department by the cash office, then the Malawi telecoms limited customer representative executive, the system itself will give signal to finance team so that it could post further the transactions to other journals so that the amount posted could be used by financial team.

### **Run Simultaneously**

The second characteristic is that of being able to run simultaneously. This is the ability of the operating system of business under Malawi telecommunications limited to perform all its functions or applications simultaneously or in the row that will not affect the other package. The best example under Malawi telecommunications limited is that of introduction of the payroll systems software application package. This payroll application systems software was introduced in finance section with the aim of designing as well as maintenance payroll packages for the employees and this payroll application systems software performs simultaneously with many finance application packages as it cannot function properly where there are no revenues with the organization.

### **Allowing fair allocation to process**

The final characteristic is that of allowing fair allocation to process. This is the ability by the operating system for the business of Malawi telecommunication limited to allow the interaction of different process over it for all the business packages to perform in accordance with the way are designed such that could produce effective and efficient product or services that are of meant with preferences of customers.

## **2.4 Impact of changes in operating systems of business-case study Malawi telecommunications limited.**

Changing of operational systems may usually bring in some implications towards the management of business and it has been observed that Malawi telecommunication limited has been greatly affected with result of frequently changing systems of which some are only implicated by the officials in

order to meet their own mutual goals and objectives and sometimes the intentions could indeed be of supernatural or beneficial to the organization and below are some of the implications that could arise as a result of frequent changes towards the operational system of business with the case study of Malawi telecommunication limited,

First implication to be detected with Malawi telecommunication limited as arising from frequency of changing operating system could be of rising of abnormal expenditures within the company. The abnormal expenditures could be defined as costs that could be incurred by the company itself of which are usually outside the financial year's budget and though these costs are of beneficial to Malawi telecommunications limited, they generally have an implication in leading to over expenditure from budgeted activities, but they may generally be of beneficial as they lead to other developments within the organization information technology infrastructure. These abnormal expenditures are summarized as per below,

### **Licensing**

Licensing is generally defined as the ability to use the package that has been designed to customer by the supplier. This is generally in a period and mostly it could be not less than three years but a fee of which is always agreed in by the supplier and the customer in a legal contract and each license has its own charges and these may sound abnormal upon the company like Malawi telecommunication limited as each license brings in unplanned costs depending on the costs. The best example could be that of Malawi telecommunication limited in 2013 upon purchasing of license from Techno tree Limited from India to using ability billing system and for Malawi telecommunication limited to use the ability system for 5 years it had to pay a license fee to techno tree of which in turn the techno tree was mandated in the repair of the system.

Licensing could be of beneficial though it has implications for bringing abnormal cost over the set budget of Malawi telecommunication limited in such a way that it helps this company to operate in a free mode to the extent that it could trade its services across the regions of the country. The best example is that Malawi telecommunications limited obtained a license from Malawi communications regulatory authority (MACRA) in 1997 and since then it can trade its services across the country in any mode of which is mandatory to terms in the signed contract. The failure to adopt the rules and regulations could lead to breach of legal contract between the parties (Ritter, Wilkson & Johnston:2004).

Lastly license could bring in implications generally to the supplier if it is not properly handled. This implication could generally arise whereby the supplier pretends other users of the package to illegally use the duly set packages at an abnormal fee for a set period. This usually puts companies' information at risk as more partners could access the information of the companies unlike the set information computer technology staff. Generally, this could happen with staff under Malawi telecommunication limited whereby the information computer technology are literally paid less as compared to others working in telecommunication companies.

### **Training**

This is defined as a process of giving extra knowledge to users from the expatriates and with the intention of letting them acquire that knowledge so that they could portray it in the art of producing goods and services but these drawing of these arts could have implications towards the companies like Malawi telecommunication limited and some of the implications are as per below,

Upon frequent change of operating system of a business like what happens with changing of operating systems of machines and packages in Malawi telecommunication limited, it generally has an implication that abnormal costs could be incurred in hiring of expatriates of which may be responsible to train local members of staff. These expatriates usually charge the local company per day depending on the rate of agreement in the contract. The best example could be whereby Malawi telecommunication limited had to incur some abnormal expenses in hiring of expatriates from techno tree in India over the training of ability packages and on how to use the billing packages. It took almost a period of 30 days to train the staff of which each day had its own charge depending on the contractual terms (Ritter, Wilkson & Johnston:2004).

The other implication towards frequent change of operating system is whereby the general staff of the company are unwilling to gain the knowledge through trainings and the best example could be that of Malawi telecommunications limited of which under its business operating system it introduced OCS a system often used by its members to identify and track in telephone and internet faults but only few technicians had knowledge of it because they were unwilling to learn over it and at the end more faults could accumulate as well took more time to be rectified.

Lastly, if the members of staff aren't properly trained over the operating system of the business such as on how to use SAP business one of which is best package used by Malawi telecommunication limited, therefore this may generate implications as there is lack of knowledge over how the systems could be used by the staff themselves thence leading to abnormal errors all the time and the best example could be that of Malawi telecommunications limited in the year 2013 of which staff weren't properly advised on how to generate bills by the techno tree and this had an implication of misinformation of customers to the extent that some had to pay wrong bills (Dagger, Sweeny & Johnson :2016).

### **Installations**

This is defined as an ability by the companies technical team to design and erect the operating system to run a specific business and big companies like of Malawi telecommunications limited, installations involves erecting fiber cables, placement of ethernet cables that usually runs transmission of the data and as well as maintenance of companies business general operating systems that are used to run programs such as sap business one and the ability used to perform billing system issues and as a result of frequent changes over time within the operating system, it may bring in some implications and below are some of these implications arising as results of installations of operating system of business under Malawi telecommunications limited,

The first impact that may arise because of installation of an operating system of business under to Malawi telecommunication limited is that if installation of machines is not properly designed then it might lead to loss of business with clients to which the company rely in its revenue generation. The best example could be that of Malawi telecommunication limited of which as service provider it poorly designed an operating business system at crossroads hotels in 2014 of which it resulted into loss of business as crossroads hotels had no choice but to terminate the contract (Ritter, Wilkson & Johnston:2004).

The second impact that may as well arise as a result of installing a business operating system could be that if the operating system is not properly handled upon installing it, there may be repacautions arising such as poor network systems, poor transmission of data from one endpoint to different subscribers and the best example could be that of Malawi telecommunications limited of which due poor installation of its fiber cables from Lilongwe to Mzuzu was poorly installed and thence it affected the operating system of its business in the northern region.

The third impact that could arise upon installations of the operating systems of the business more especially with Malawi telecommunications limited could be that of expensive for the telecommunication limited companies to run the machines. This involves maintenance of fiber cables and other data related and maintenance machines, the purchasing of equipment for maintenance as well as sometimes hiring of specific staff to assist in the maintenance of the related equipment's. The best example could be that of Malawi telecommunications limited itself, that's upon installation of ability machines to run the new billing system it had to hire experts from India to finalized the installation process of which the company had book a loan to in order to order these experts of which was a bit expensive though at the end it had to benefit all the teams of the company.

Lastly, the other impact that installations of operating systems could generate could be that of requirement of extra knowledge to the general staff and as their frequent changes over operating systems of the business now and then, the general staff deserves to be equipped with extra knowledge that is indeed related to the updated operating systems all the time. Otherwise if they are not equipped, more errors could be encountered upon operation of business systems and if the operating system of the business has been encountered with more errors or mistakes then business products are generally expected to be unsatisfactory to the consumers and the best example is that of Malawi telecommunications limited whereby it had a mandate of hiring low equipped and knowledgeable staff with the main reason of saving its costs. But this had an impact on business as due to lack of knowledge its services turned to be poor on the market and generally it lost its best glory of being the best telecommunication trading company (Sang, Lee & Kang :2012).

## **2.5 Summary**

This chapter reviewed the related literature over the characteristics of operating systems of the business of which included ability to multitask, run simultaneously and as well of allowing fair allocation to process. It also analyzed the importance of changes of the operating system of the business, and it has again analyzed the impact of changes in the operating system of the business basing on licensing, training, and installations of businesses machines and finally all these have been based generally on Malawi telecommunications limited of which is our case study (Dagger, Sweeny & Johnson :2016)

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## **3. Research Methodology**

### **3.1 Introduction**

This chapter has covered the following, aims and objectives of the study, the participants and location of the study, the data collection strategies, the research design and methods and the chapter also covered on about description and purpose of the research of which includes, the recruitment of the study participant, the pretesting and validation, and the administration of the questionnaire and finally the data analysis and chapter summary.

### **3.2 Aims and objectives of the study**

The main aim of the study is to find out the impact of the changes in operating system of the business in relation to Malawi telecommunication limited (MTL). The main objectives of the study are as follows:

- 1). To identify the potential skills and objectives that often lead to changes in the business systems more especially with Malawi telecommunications limited.
- 2). To ascertain the major factors that lead to changes in operating systems of the business more especially with Malawi telecommunication limited.
- 3). To assess the impact of changing frequently the business operational systems more especially with Malawi telecommunication limited (MTL).
- 4). To verify these major factors and tracing on the ways in which could be corrected for future engagements more especially with Malawi telecommunications limited (Gabriel & Richard :1993).

### **3.3 Participants and Location of the study**

The participants are also known as targeted populations, and it is defined as the total group who would be ideal to the subject of the research study and about whom one is trying to say something. The population could be defined as an aggregate or totality of all the objects, subjects or members that conform a set of different specifications. The participants include the regional manager(commercial), the regional manager (technical), the switching

engineer (technical), the power technician (technical), CPE technician (technical), Transmission technician (technical), Exchange technician (technical), Key account executive (commercial), shop executives (commercial) and support executives' team both technical and commercial departments.

### **3.4 Data collection strategies**

Upon data collection for the study, the researcher will obtain the permit from management of DMI-St Eugene University and the management of Malawi telecommunication (Centre and North) of which a permission is expected to be granted and thereafter the researcher will generally visit the selected sample of executives.

Towards visiting the selected sample of commercial and technical executive team of Malawi telecommunication, the researcher is expected to establish or create a very descent rapport with each respondent with the general view of verbally explaining the mission upon the study and the researcher will administer questionnaires so that data could be of meaningful purpose at all costs (Neuman:2014).

### **3.5 The research design**

The research design could be defined as a blueprint of conducting the study with maximum control to factors that will interfere with the validating of the research findings and the research design could also be defined as an overall effort for answering the research questions or testing the research hypothesis.

This study will generally employ a descriptive survey design of which combines both the qualitative and quantitative research methodology and the descriptive design survey is indeed considered relevant for this study because the study itself intends to collect data over respondents towards their opinions on the impact that will rise as result of frequently changing of operating systems by the Malawi telecommunications limited (Orodho:2004)

#### **3.5.1 Descriptive purpose.**

The study will use both the qualitative and quantitative research methodology and generally will imply questionnaires as part of the research method. The will also emphasize on both qualitative and quantitative research methodologies because the data collected will be in the form of words, figures, images, ideas and opinions of which will be presented as well in the form of figures, numbers or percentages and generally the questionnaires will be engaged with the aim of gathering data and as well as to avoid time consuming of the respondents over completing the designed questions appropriately (Punch:2005).

##### **3.5.1.1 Construction Instruments**

The data collection instruments for this study will be the questionnaires and the questionnaire are defined as a posit that open-ended questions permit or allows the respondents to give unrestricted opinion or idea. The close ended questions could be employed because they are quicker and easier to code and statistically analyze. The open-ended questions allow the respondents to express their ideas or opinions without being influenced by the researchers (Mugenda & Mugenda:1999)

##### **3.5.1.2 Recruitment of Participants**

With recruitment of participants for the study, sampling is the one salient component over research. Sampling is defined as a process of selecting subset of cases to draw conclusions about the entire population. It is a process of selecting portion of the population to represent the entire population. The sampling techniques were identified as probability and non-probability sampling. The probability sampling allows researchers to give equal chances to every member of the population being selected as part of sample and example could be simple random sampling, systematic sampling, and cluster sampling. On-probability sampling is whereby the researchers has no means of determining any chances as particular elements of the sample and best examples include quota, purposive and convenience sampling techniques (Punch:2005)

This sample employed simple random sampling and purposive sampling techniques. The simple random sampling was used in selecting the members in the commercial department of Malawi telecommunication limited on how to participate in the study and convenience sampling was used in selecting the regional manager, team leaders etc. The purposive sampling was used in these people in view of the experience over factors that affect operating systems of Malawi telecommunication limited.

##### **3.5.2 Pretesting and Validation**

Validity is generally concerned with upon establishment of on whether the content of questionnaire is supposed to measure. The researcher firstly consulted the regional commercial manager for authority and the regional commercial manager supervised the questionnaires individually and provided feedback to the researcher who then incorporated the recommendations to the final questionnaire that was being used for the data collection. At first 10 questionnaires were used for pretesting in commercial office and the purpose was to check suitability, relevance of information being used, language used, the content of variety of instruments from general responses. This proved general reliability of research instruments (Neuman:2014)

### 3.5.3 Administration of Questionnaires

The researcher physically distributed the questionnaires with key account executive and representative of marketing development team in area 49 with the aim of clarifying questions to members in better way and this ensures reliability of data that was being collected.

### 3.6 Analysis of the Data

Data was categorized, coded, and subjected to Microsoft excel for analysis and it was done using both qualitative and quantitative techniques (Orodho:2004).

### 3.7 Summary

This chapter presented aim and objectives of the study, location, target participants of the study, the strategies of data collection, research design and methods that were used in carrying out data analysis. It also stated how research instruments were pretested, validated, and administered and as well as how data was analyzed.

## 4. Presentation of Results

### 4.1 Introduction

This chapter presents results from primary data collected from Malawi telecommunication limited officials and business development officials within area 49 free market. The aim of this chapter is to provide something meaningful about the study. The study employed both qualitative and quantitative research methods and data was collected through the questionnaires. With reference to responses 58 respondents out of 70 sampled responded to questionnaire representing 82.8%. 6 out of 10 respondents were managers (3 Malawi telecoms managers and 3 business development managers-area 49) representing 60% and 46 out of 50 respondents were Malawi telecoms limited and business development managers from area 49 responded representing 92%.

### 4.2 Responses from Malawi telecoms limited and business development officials.

A total of 58 out of targeted 70 respondents responded to the questionnaire representing 82%

#### Section A: Personal Information of respondents.

The intention of this section was to find out personal details of the respondents.

Out of the 58 respondents to the questionnaires 48 were males representing 83% and 10 were females representing 17% as represented in the table below,

| Gender | Respondents | Percentage |
|--------|-------------|------------|
| Male   | 48          | 83%        |
| Female | 10          | 17%        |
| Total  | 58          | 100%       |

### 4.2.2 Position held by the respondents and sector of business

The respondents held various positions in the commercial department of Malawi telecoms limited as key account executive, customer executive, team leaders, customer sales representative, regional commercial manager, and business development officers who generally own various shops in area 49. These belong to telecoms and business development partners as sectors of business.

#### Section B: Success factors that steer changes in operating systems of Malawi telecommunication limited.

The intention was found out factors that have ability to steer changes in operating systems of Malawi telecommunication limited.

### 4.2.3 Critical factors that have ability to steer change in operating systems of Malawi telecommunications limited.

The table below summarizes on how both Malawi telecommunication officials and business development officials from area 49 describes factors that could bring change in operating systems of Malawi telecoms limited.

| Success Factors                           | Number of respondents out of 58 representatives | Percentages |
|---|---|-------------|
| Types of systems application              | 48  | 82.76%      |
| Number of systems applications            | 46  | 79.31%      |
| Computer Design                           | 14  | 24.14%      |
| Application available on operating system | 46  | 79.31%      |
| Hardware specifications                   | 46  | 79.31%      |

The results from table 4.1 above shows that types of systems applications of which has 48 representatives out of 58 respondents to which is represented by 82.76% have the highest impact over all the critical factors steering ability to change operating systems in Malawi telecommunications limited and this is followed by number of systems application, applications available on the operating system and hardware specifications of which all are represented by 79.31% and computer design is the least of which is represented by 24.14%. This means that all 48 respondents represented by 82.76% of which are the types of systems applications have the general higher impact towards the success of systems operations of Malawi telecommunications limited and have to be considered for good performance of company at all cost.

#### **Section C: Supporting factors critical to leading in change of operating systems of Malawi telecommunications limited.**

The intention was to find out the supporting critical factors that could lead to change in the operating systems of Malawi telecommunication limited.

#### **4.2.4 Supporting factors critical to leading change in the operating systems of Malawi telecommunication limited.**

The table below summarizes on how both Malawi telecommunications limited and business officials from area 49 free market adhere to supporting factors critical to leading in change of operating system and they response was strongly agree, neutral, disagree, and strongly disagree.

| Critical Factors                                | Total respondents 58 | Percentage |
|---|----------------------|------------|
| Market Demand                                   | 58                   | 100%       |
| Quality of products under that operating system | 55                   | 94.83%     |
| Changes in technology                           | 50                   | 86.21%     |
| Adaptation to climate change                    | 30                   | 51.72%     |
| Level of knowledge to use the operating system  | 30                   | 51.72%     |

58 out of 70 sampled agreed that marketing demand is the critical factor that usually affect the operating system of Malawi telecommunication limited representing 100% and this was followed by quality of products under that operating system of which 55 participants responded to it and this represented 94.83% and thirdly 50 participants responded that changes in technology usually affects the operating system of Malawi telecommunication limited representing 86.21% and on adaptation to climate change and level of knowledge to use the operating system same number of responded to these two critical factors of which is 30 participants and this represented 51.72%.

This generally means that the market demand which represents 100%, the quality of products under that operating system of which represents 94.83% and lastly the changes in technology of which is represented by 86.21% are the best critical factors that leads in supporting to change in the operating systems of Malawi telecommunications limited.

#### **Section D: The external factors impacting in the changing of operating system of companies-Malawi telecommunications limited.**

The section intended to analyze the external factors that impacts towards the changes of the operating systems of companies more especially Malawi telecommunications limited.

#### **4.2.5 The external factors impacting in the changing of operating system of Malawi telecommunication limited.**

The table below summarizes on how both Malawi telecommunication limited, and business development partners of Area 49 free market adhere to external factors that impact towards change in operating systems of Malawi telecommunications limited.

| External Factors     | Total number of representatives 58 | Percentages |
|----------------------|------------------------------------|-------------|
| Regulatory framework | 58                                 | 100%        |
| Government policies  | 58                                 | 100%        |



|                         |    |        |
|-------------------------|----|--------|
| Marketing systems       | 55 | 94.83% |
| Capacity building       | 20 | 34.83% |
| Level of infrastructure | 58 | 100%   |

The table above shows that 58 respondents out of 70 sampled agreed that regulatory frameworks, government policies and level of infrastructure of which each represents 100%, then followed by the marketing systems of which 55 out of 70 sampled responded to it of which represented 94.83% and least external factor was capacity building of which 20 participants responded out of 70 to which represented 34.83%.

This generally means that, the regulatory framework, the government policies, and the level of infrastructure to which all 58 sampled participants responded out of 70 expected sample representing 100% are the best external factors that could affect the operating systems of Malawi telecommunications limited at all costs.

#### **4.2.6 Do you think there are any measures for these changes impacting the operating system of company like Malawi telecommunications limited.**

The intention was to find out if indeed there are any measures for these changes impacting over the operating system of Malawi telecommunications limited and the table below summarizes on how both Malawi telecommunications limited and business development managers from area 49 free market realizes of these measures towards the change in operating systems of the company more especially Malawi telecommunications limited.

| Mode of respondents | Total respondents 58 | Percentages |
|---------------------|----------------------|-------------|
| Yes                 | 54                   | 93%         |
| No                  | 4                    | 7%          |
| Total               | 58                   | 100%        |

According to the table above, 54 out of 58 respondents of the expected 70 over the sample agreed and representing the mode yes that there are indeed measures towards the impacting of operating systems of Malawi telecommunications limited and this represented 93% and 4 out of 58 respondents of the 70 on expected sample, agreed that there are no measures towards in impacting over operating systems of Malawi telecommunications limited to which represents 7% of the sample.

This generally means that there are so many measures that could be impacting on the changes of the operating system of Malawi telecommunications limited of which include the regulatory framework, government policies, marketing systems, the level of infrastructure and capacity building and these will be analyzed below.

##### **a) Regulatory frameworks**

These are legal bodies to which are mandated to provide rules and regulations at both national and international levels. The best example at national level is the Malawi communications and regulatory authority (Macra) of which is mandated by an act of parliament here in Malawi to monitor performance of radio stations and as well issuing of licenses to new radio stations and television with the intention of ensuring control over channeling of services in the broadcasting radios and as well as televisions. The table below shows some of the activities to which are performed by the regulatory frameworks here in Malawi,

| No | Name of activity        | Usage              |
|----|-------------------------|--------------------|
| 1  | Regulatory of documents | Planning & control |
| 2  | Licensing               | control            |
| 3  | certification           | control            |
| 4  | regulation              | control            |
| 5  | act                     | Planning & control |

According to the table above, it has been found out that the regulatory frameworks could assist in the planning and control over in changing of the operating systems of Malawi telecommunications limited.

##### **b) Government policies**

These are rules and regulations that are set out in parliament so that companies such as Malawi telecommunications limited through communications and regulatory act should be followed and once, they are breached, then Malawi telecommunications limited could be taken to court for breach of duty or breach of contract between the parties. The best example could be whereby under Malawi communications and regulatory act, Malawi

telecommunications limited had failed to provide its services as per signed contract to its corporate customers within or outside the capital city of Malawi. Some of the best examples of government policies include the healthcare policies, the communication and regulatory policy, licensing policy, the capacity building policy, the money and circulation control policy and the drug usage control policy.

**c) Marketing systems**

These are systems used to sell and market companies’ products and as an external factor it has an impact in the change of Malawi telecommunication limited operating system in such a way that if not properly managed it may result in the loss of business. The examples could be simple market strategies, the corporate market strategy, the administration market strategy, and the technical management market strategy and for its success if business of selling the scratch cards and internet services to different customers, Malawi telecommunications limited uses the simple market systems to achieve the set profits and targes and below diagram analyze the simple marketing systems strategy,

**Simple marketing system**

|  |   |  |                      |                          |
|--|---|--|----------------------|--------------------------|
|  |   |  |                      |                          |
| <b>Producer/seller/Malawi telecommunications limited</b> |   |  | <b>communication</b> |                          |
|  | <b>Product/service (Scratch cards/internet/phoneline operation)</b> |  |                      | <b>Consumer/receiver</b> |
|  |   |  | <b>Feedback</b>      |                          |

With the table above, Malawi telecommunications limited uses the simple marketing process whereby, the producer of which is the Malawi telecommunications limited designs the scratch cards and the set internet services for its customers and through direct communication the products are with the consumers and the receivers. These receivers provide feedback overs the products to the producers who is Malawi telecommunications limited to either design new or send back to them the same sample (Hakanson :1982)

**d) Capacity building**

This is a process whereby companies individuals or companies itself brings itself knowledge, training, teaching,support,development,skills and self-development in order for it to equip itself and its employees for the future development of its employees and the companies itself. On the other hand, capacity building could be handled by meeting the employees’ aspirations successfully, by meeting the employees’ set goals and strategies within the set period. The capacity building could also be set by ensuring that leadership skills and management skills are performed in accordance with established employment rules and regulations for the period set. The capacity building includes the application of organizational capabilities in a positive way to which could not affect or harm any organizational member at a set period and for the capacity building to be in an effective way management of the company must apply an efficient and well qualified human resource, have proper and efficient assets, good and appropriate standard system and finally an appropriate well organized company structure. But most of Malawi telecommunications limited employs and business development partners in area 49 disagreed with this to be one of the best external factors because, with Malawi telecommunications limited according to data collected it isn’t practiced by management thence it was seen to be improper to amend it as the best factor.

The table below shows some of the characteristics of the capacity building,

**Capacity building (MTL)**

|                 |                                |            |                              |
|-----------------|--------------------------------|------------|------------------------------|
| Human Resources | Assets and Financial resources | Mtl System | Mtl Organizational structure |
|-----------------|--------------------------------|------------|------------------------------|

Organizational capabilities

Leadership and Management Skills

Strategies

Aspirations

**According to the diagram above, below are the conclusions that were gathered in what is regarding capacity building.**

- 1.Capacity building includes the human resource of the company and human resource includes all the general staff performing duties of the companies with the aim of letting the company to make profit. This profit may include all the inflows of cash or in kind of which are beneficial to the organization or are in line with companies' motivation to the extent that may help in bringing in positive benefits to the companies (Kim: Kim & Park :2010)..
- 2.With the diagram above capacity building for Malawi telecommunications limited could means the assets and financial resources the company must generate money or cash in kind for running or performance of its duties on daily basis. This may mean physical assets that companies owns or the liquid assets that are generally owned by the company.
- 3.The capacity building may mean Malawi telecommunication limited system and this system may include all general systems that assist in the operations of day-to-day activities and these systems may include billing system, ocs system, sap business one and office 365 system.
- 4.Malawi telecommunication limited organizational structure may also mean the capacity building of the company itself and this structure consist positions as well in line with the general duties that are designed and performed by the members of staff on daily basis.
- 5.The organizational capabilities also involves capacity building of the company and these includes the well being of the company to either employ members of staff, to generate revenues, to control the expenditures, to maintain it members of staff and to adhere to government policies all over the time of which may include tax policies, labor policies and other policies that may be needed in the control and motivation of the employees on daily basis (Kim: Kim & Park :2010)...
- 6.The leadership and management skills of Malawi telecommunication limited may also represent the capacity building of the company. The leaders or managers must develop articles that may be used to translate the ideas that are obtained by them from time to time with the aim of sharing the skills they have to lower staff to develop ideas that could be applicable as well soon. The best example could be that of development of marketing skills of which could be as well applicable to other employees of the same department in the next 10 years.
- 7.The capacity building of Malawi telecommunications limited may also include its strategies and these are policies or ideas that are designed to be used in the management and running of companies of activities. The best examples could be that of simple marketing strategies that are designs by Malawi telecommunications limited management over collection of sales payments to its corporate customers and it usually specifies that these corporate customers should ensure that bills are settled at 20<sup>th</sup> of each month to avoid disconnections.
- 8.Lastly, capacity building to Malawi telecommunication limited may also include the aspirations of the company and these include all what motivates the company to reach its set goals and objectives set for the future. These aspirations may include ambitions to generate more revenues, to recruit more labor, own more assets, to avoid liabilities that could lead to loss, and this could be maintained by ensuring that the company is performing in line with its set goals and objectives (Kim: Kim & Park :2010).

In conclusions all mentioned above are part and parcel of capacity building and indeed they need to be considered for future developments of companies such as Malawi telecommunications limited.

### **4.3 Summary**

This chapter presented results from primary data collected from the targeted respondents and has revealed that government policies and the level of infrastructure are the best external factors that affect the operating systems of Malawi telecommunication limited as all presents 100% and they are followed by the supporting factors such as the marketing demand (100%),the quality of the products(94.83%) and the changes in technology of which represent 86.21%.In conclusion all the mentioned above are the best external and supporting factors that really impacts the operating systems of Malawi telecommunications limited and they have to be treated with care all the time to avoid disturbances from internal and external sources.

## **5. Discussions and Findings of the study**

This chapter provides a discussion of the research findings of the study. The aim of the study was to find the impact of changes in operating systems of the business with the case study of Malawi telecommunications limited (MTL).In order to achieve this aim , the research objective have to assess, the critical factors that have the ability to steer change in the operating system of Malawi telecommunications limited, the supporting factors that have lead towards change in the operating of Malawi telecommunications limited and the measures that could be taken in regard with assessment of these external factors towards the operating system of Malawi telecommunication limited.

The findings of the study have been discussed using the below respective objectives,

### **a). Critical factors that have impact to steer change in the operating system of companies-Case study Malawi telecommunication limited (MTL).**

The research found that critical factor are those that are external to Malawi telecommunication limited but usually that have an impact in the operating system of this company and these external factors indeed includes the regulatory frameworks of which are rules and regulations issued by the regulatory authorities, the government policies issued towards the management of that operating system by the government ,the marketing systems that are indeed supposed to be applied towards safety monitoring of the operating systems and the capacity building that is engaged towards the management of that operating system and generally within Malawi telecommunication systems such as billing, sap system and ocs systems.

**b). Supporting factors leading to the change in the operating system of Malawi telecommunications limited.**

The researcher found that there are indeed some factor that are in support with leading to the change in operating systems of Malawi telecommunications limited(MTL) and these factors includes the companies marketing demand, the quality of the companies products ,the adaptation to climate change by Malawi telecommunications limited and the level of knowledge by the staff and the customers of Malawi telecommunications to use the products or the services.

**c). Assessment of the measures that would be taken as part of the external factors impacting in the operating system of Malawi telecommunications limited.**

The researcher finally discussed over motives that could be taken as part of measures to control all the external factors impacting the operating system of Malawi telecommunications limited and these were recorded as regulatory framework set by government have to be followed all the time, the government policies set by the parliament have to be followed all the time in controlling systems, the marketing systems and the capacity building all the time.

In conclusion all these mentioned are set to be some the factors that the researcher has discovered to which are in support and line with factors indeed impact towards the operating system of Malawi telecommunication limited and must be considered now and then as major concern over which if the company deserve to perform must be put to priority all the time.

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**6. Recommendations and Conclusions****6.1 Introduction**

This chapter represents a summary of the research findings, the implications of the study, the recommendations to solve the problems and recommendations for the future study.

**6.2 Research Findings**

The research findings recoded that the external factors or the critical factors, the supporting factors and the assessment factors all have an upper hand towards impacting the operating system of Malawi telecommunication limited.

**6.3 Implications of the study**

The researchers' findings shows that there is an implication towards the study as management of Malawi telecommunications limited always doesn't engage its employees in personal advanced trainings thence unable to operate their machines or making the machines not user-friendly to the employees.

**6.4 Recommendations to solve the research problem.**

Below are the recommendations to solve the problems,

- 1.ensuring adherence to the regulatory frameworks all the time.
- 2.designing the operating systems that are of user-friendly
- 3.ensuring adherence to the government policies all the time.
- 4.ensuring that there's a good level of knowledge to use the system by all the employees at all levels.
- 5.ensure that all measures are employees that could be used in controlling all the factors that could easily harm the operating system of Malawi telecommunications limited.

**6.5 Recommendations for further studies**

The researcher discovered the findings below to be used for further studies,

- 1.The Malawi telecommunications limited must ensure that operating system being designed for daily activities must be user friendly to all its employees.
- 2.The Malawi telecommunication limited must ensure that its operating systems are regulated and registered with Malawi communication regulatory authority (MACRA).
- 3.The Malawi telecommunications limited management must ensure that its operating systems are in compatible the environment to which are to be used.

**6.6 Summary**

This chapter included the research findings, the implications of the study, the recommendations of study and recommendations for further studies.

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**Questionnaire**

**Appendix II: QUESTIONNAIRE FOR KEY INFORMANTS**

Dear Respondent,

I am a Postgraduate student at DMI-St Eugene University pursuing master’s in business finance and management degree. I am carrying out research on” the impact of changes in operating systems of business-case study Malawi telecommunications limited (MTL)of Malawi”. You have been chosen as one of the respondents. The information given on this questionnaire will be treated with absolute confidentiality and will be used only for the purpose of research. Please complete the questionnaire appropriately, truthfully, and honestly. You need not write your name. Where choices are provided, put a tick to indicate your answer.

Yours sincerely

Richard Marichi

DMI-St Eugene University

**SECTION A: PERSONAL INFORMATION /BIO DATA**

1. Position held in your organization .....
2. Sector of business your organization belongs to

Telecoms    Systems

Banking    Systems

Development Partners

|  |
|--|
|  |
|  |
|  |

**SECTION B: SUCCESS FACTORS THAT STEER CHANGES IN OPERATING SYSTEMS OF MALAWI TELECOMMUNICATIONS LIMITED.**

3. The Critical factors that have ability to steer change in operating systems of Malawi telecommunication limited.

*1=strongly disagree, 2= Disagree, 3=neutral, 4=Agree 5= Strongly Agree*

|                                | 1 | 2 | 3 | 4 | 5 |
|--------------------------------|---|---|---|---|---|
| Type of systems application    |   |   |   |   |   |
| Number of Systems applications |   |   |   |   |   |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| Computer Design                                |  |  |  |  |  |
| Applications available on the operating system |  |  |  |  |  |
| Hardware Specifications                        |  |  |  |  |  |

4. The supporting factors critical to leading in change of operating system of the company.

1=strongly disagree, 2= Disagree, 3=neutral, 4=Agree 5= Strongly Agree

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Market Demand                                   |   |   |   |   |   |
| Quality of products under that operating system |   |   |   |   |   |
| Changes in technology                           |   |   |   |   |   |
| Adaptation to climate changes                   |   |   |   |   |   |
| Level of knowledge to use the operating system  |   |   |   |   |   |

5- The external factors impacting in the changing of operating system of companies

1=strongly disagree, 2= Disagree, 3=neutral, 4=Agree 5= Strongly Agree

|                         | 1 | 2 | 3 | 4 | 5 |
|-------------------------|---|---|---|---|---|
| Regulatory framework    |   |   |   |   |   |
| Government policies     |   |   |   |   |   |
| Marketing systems       |   |   |   |   |   |
| Capacity building       |   |   |   |   |   |
| Level of infrastructure |   |   |   |   |   |

6. Do you think there are any measures for these changes impacting the operating systems of a company?

YES  NO

If yes, what measures do you think can be taken to improve the performance of operating systems in Malawi?