

# Factors Affecting It-Dependent Service Delivery Organisations In Tanzania, The Case Of Tanzania Revenue Authority

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*Abstract: The purpose of the research was to establish the factors affecting IT dependent service delivery at the Tanzania Revenue Authority. The objective that guided the research paper was; to identify the factors affecting IT services delivery at the Tanzania Revenue Authority. The researcher used descriptive research design. Targeted population of the research paper were 19 858, sample size of 586. Research employed convenience sampling and simple random sampling techniques and the respondents were customers and employees of Tanzania Revenue Authority. Data collection instrument used in the research was a questionnaire, data were analysed using descriptive statistic, mean and standard deviation frequency, charts, tables, and percentages,. The research findings showed the factors that hinder IT-dependent organizations, to not fully benefits on the advancement and deployment of IT in delivering their services. Those factors include; connectivity problems such as network/internet, high price of IT devices, unstable power supply for charging IT devices, lack of awareness and training on how to use IT devices. The research recommended that there should be special units for IT service delivery to help the users of IT devices.*

**Keywords: IT-Dependent Service, IT Service Delivery and Information Technology.**

## I. INTRODUCTION

Information Technology (IT) is a made-up of hardware and software solutions, which help organisations in gathering, organizing, and analysing data that enables organisations to accomplish their goals (Kumar, 2014). IT has become a very important and useful tool, which operate daily activities that take place within many organisations in order to strengthening the organisation's competitive advantages (Ghobakhloo et al., 2012). In the research paper of Ivanko (2012), several scholars have attempted to define an organisation by stating an organisation as, "a conscious human activity of linking and coordinating of the production agents or a technique of combining the processes for a purposeful realizing of the objectives set" (p. 2).

Technologies helps the organisations to simply operate its processes such as marketing, production, human development and also these technologies are used in making accurate decisions, saving time and money (Ahmad, 2014).

Tanzania Revenue Authority (TRA) is an IT-dependent organisation established by Act of Parliament No. 11 of 1995, and started its operations on 1 July 1996 with its mission of increasing domestic revenue through enhancement of voluntary tax compliance.

In order to execute its IT services efficiently, the Tanzania Revenue Authority (TRA) uses a number of systems including Electronic Fiscal Devices Management System (EFDMS), Tanzania Custom Integrated System (TANCIS), Tanzania Revenue Authority Online Taxpayer Registration Portal, Tax Return Electronic Filling System, and Revenue Gateway System. For this research paper, the researcher used Electronic Fiscal Devices Management System (EFDMS) as one of the system in the TRA that provides IT services through optimizing the revenue collection in tax administrations and connects the physical device such as cash registers, fiscal printer or Point Of Sale system with the server of Tax Authorities. It helps tax administration to receive full information in a real time regarding the sales made from a specific fiscal device that belongs to a particular taxpayer.

While studying the factors affecting IT-dependent service delivery organisations, this has undertaken place in different developed countries; little attention has gone into developing countries. Therefore, this work intends to undertake such a research paper in Tanzanian IT-dependent service delivery organisations by focusing on Tanzania Revenue Authority.

## PROBLEM STATEMENT

There are different factors that limit the use of technologies in the organisation. Such factors include lack of management support, size of organisation, scarce resources, and the innovation history that influences the extent of technology adoption and use in the organisation (Dawson, 2007). Barzekar and Karami (2014) stated, “Nowadays organisations live in an active and dynamic environment which is influenced by internal and external factors of the organisation, some external factors affecting the performance of organisations include economic, political, social and cultural” (p. 1).

Despite the above studies, little attention has been taken to some of the factors such as human factors, low level of education, low bandwidth, poor technology environment, poor security level and power servers being down in which emerges for the factors affecting IT-dependent service delivery organisations in Tanzania. Therefore, this research paper was set up to explore the factors affecting IT-dependent service delivery organisations by focusing on Tanzania Revenue Authority (TRA). The research paper intended to identify the factors and come up with useful, concrete factors and suggestions, which eliminated the problem.

The geographical scope of this research paper was conducted at Tanzania Revenue Authority (TRA) Ilala Region in Dar es Salaam, Tanzania.

Time scope of the study was 2013-2018, and the researcher used Model of IS Success to ground this study.

## II. LITERATURE REVIEW

Services are the important part of business output and investments whereby Information Technology (IT) is engaged to help these provided services and to represent the important serving of business spending. Therefore, the objective of such investments creates business value in an organisation (Adewoye et al., 2011). Today Information Technology has become a very important component that connects main operation of businesses like marketing and ratemaking hence making some of organisation to depend on the use of IT when delivering its services (Idris et al., 2013). The satisfaction of customers and good customer service delivery within the organisation is an important factor for an organisation to accomplish the successes and achievement of the organisational goals (Muriithi, 2013).

The scope of activities that conducted within a particular organisation has affected Information technology; this means the organisations that have many IT activities will more use IT than the organisations with “relatively lesser span of activities” (Nwakanma et al., 2014, p. 4). Power supply problem, price of IT devices (hardware and software) been

high, poor funding and budgeting, shortage of skilled IT resources, and resistance of personnel to change has also affected an IT service delivery in organisations (Usman & Said, 2014). In most organisations, it is very difficult to make vital transactions online without the particular person physically being present in that particular organisation. This is because customers have not fully engaged in using IT as the means of reaching their respective organisations (Idris et al., 2013). Some users of technologies do not have interests of using technologies because of lack of infrastructure that support the usage of Information Technology. In addition, the government does not make its members to be aware of Information Technology and inadequate environment for importation and usage of IT has affected the uses of IT service delivery (Ibironke et al., 2011).

In organisations, top management makes decisions about the current and future activities that run within an organisation whereby top managers of the organisation makes the daily decision functions to future investments. Therefore, top managers directly affect information technology because all the activities conducted in the organisations are the decisions from top managers, which rise from the poor planning stage to the implementation, poor maintaining, and system upgrade stages (Ghobakhloo et al., 2012).

## THEORETICAL PERSPECTIVES

This research paper based on Information Systems Success Model (DeLone and McLean’s 2003 IS success model). DeLone and McLean IS success model, is the theory that describes, identify and explains the critical relationship of six dimensions of Information System success, namely system quality, information quality, service quality, the system use/usage intentions, user satisfaction, and net system benefits which seeks to deliver a full understanding of IS success as shown in figure 4.1.

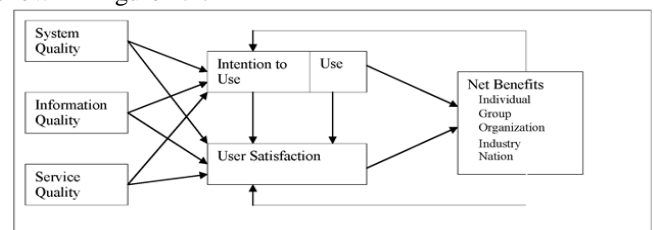


Figure 4.1: Model of IS Success (Source: DeLone and McLean, 2003)

## III. RESEARCH METHODOLOGY

### RESEARCH DESIGN

In order to address the research problem, this study used descriptive research design method, descriptive research design is the one used in a study to find out the how the study is to be done, where is it done and what does the study needs.

### RESEARCH PAPER POPULATION

The population of this research paper included employees and customers of Tanzania Revenue Authority (TRA) in Ilala

Region. By using employees and customers of Tanzania Revenue Authority (TRA) in Ilala Region, it helped to get the required information that solved the problem of this research paper. The research population was 19 858, whereby 377 were employees and 19 481 were customers.

Category	Number of respondents	Percentage
Customers	19 481	98.1
Employees	377	1.9
<b>Total</b>	<b>19 858</b>	<b>100</b>

Source: Tanzania Revenue Authority in Ilala Region (2017)  
Table 5.1: Target Population

#### SAMPLE SIZE AND DESIGN

The research population were employees and customers of Tanzania Revenue Authority (TRA) in Ilala Region. The choice of Tanzania Revenue Authority based on the factor that TRA is an organisation whose services depends much on the use of IT to collect tax from taxpayers by using a system known as Electronic Fiscal Devices Management System (EFDMS). This system optimizes the revenue collection in Tax Administrations and connects the fiscal device such as fiscal printer, cash register or Point of Sale system with the server of the Tax Authorities. This helps the Tax Administration to receive full information in a real time regarding the sales made from a specific fiscal device that belongs to a particular taxpayer. The sample size for this research was 586 as determined by using the mathematical formula (Solvin's formula).

Category	Sample size	Percentage
Employees	194	33.1
Customers	392	66.9
<b>Total</b>	<b>586</b>	<b>100</b>

Source: Tanzania Revenue Authority in Ilala Region (2017)  
Table 5.2: Sample size of the study

#### SAMPLING PROCEDURE

This research paper used convenience sampling to collect data from customers and simple random sampling to collect data from employees of TRA in Ilala region, the research instrument used was questionnaire to collect data from the respondents. The study used face validity by doing a pilot tested on the questionnaires before the whole participant does it. For determining the content validity of questionnaires, the researcher used a supervisor from College of Business Education (CBE) and other experts from Kampala International University (KIU), data analysis for this research paper was a descriptive statistics. Statistical package for social sciences (SPSS) Version21 used to analyse data in this research paper.

### IV. FINDINGS AND DISCUSSION

#### INTRODUCTION

This chapter discusses the data presentation, analysis and interpretation of the findings obtained from employees and

customers of Tanzania Revenue Authority (TRA) in Ilala Region.

#### SAMPLE SIZE PROFILE

A sample of 194 employees was drawn from the population of 377 employees at the TRA Ilala region and likewise a sample of 392 customers was drawn from a population of 19 481 customers. The researcher used Solving's formula to presume sample size for employees and customers of Tanzania Revenue Authority in Ilala region. The researcher used a convenient sampling to acquire valid sample of 155 employees and simple random sampling to acquire valid sample of 256 customers, which made up 411 of the respondents. The response rate in this research paper is 70.1%. This response rate is satisfactory for analysis to go ahead.

Categories	Population	Sample size	Response rate
Customers	19 481	392	65.3%
Employees	377	194	79.9%
<b>Total</b>	<b>19 858</b>	<b>586</b>	<b>70.1%</b>

Table 6.1: Sample size profile

#### PROFILE INFORMATION

##### ✓ RESPONDENTS' CATEGORIES

The category of respondents in Tanzania Revenue Authority was part of the question asked for the research paper so that to help the researcher to be able to categorize and associate the respondents accordingly. The findings indicate that customers occupied the majority of this research paper with 62.3% compared to employees with 37.7%. This indicates that both employees and customers of Tanzania Revenue Authority in Ilala region were involved in this research paper though were not in equal percentages. This might be because of the population of customers was big compared to that of employees during the research paper.

In addition, the research paper requested the respondents to indicate the year in which they started their interaction with the Tanzania Revenue Authority. As shown in figure 6.2, the research paper indicates that the majority of respondents started their interaction with TRA between 2012 up to date with 74.7%, followed by respondents who started their interaction with TRA between 2004-2011 with 16.3% and from 1996-2003 were 9.0% of respondents. This implies that the majority of respondents started their interaction with TRA from 2012 up to date. This might be because there was an expectation of increment of taxpayers from 2011/2012 to the next five years.

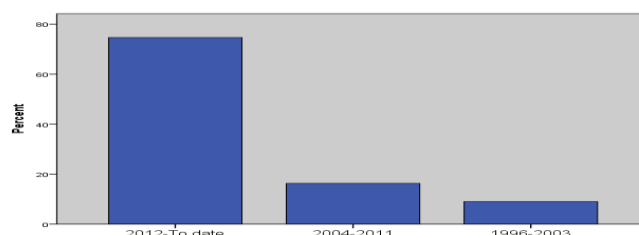


Figure 6.1: Respondents' interaction year with TRA

✓ QUALITY OF DATA

VALIDITY

The researcher did face validity by distributing six questionnaires to employees and fourteen questionnaires to customers of TRA before distributing to targeted sample. The participants returned all the questionnaires with answers as expected by the researcher.

For content validity, the researcher used one expert from College of Business Education (CBE) and five experts from Kampala International University (KIU) to validate the questionnaires.

The questionnaires were validity as the results turned to be one, which means the questionnaires were essential.

FACTORS AFFECTING IT SERVICES DELIVERY

This research paper identified the factors affecting IT service delivery at the Tanzania Revenue Authority. The respondents respond using five Likert scale as shown in table 6.2 where by Strongly Agree (SA) =5, Agree (A) =4, Neutral (N) =3, Disagree (DA) =2 and Strongly Disagree (SDA) =1.

Statements	SA	A	N	DA	SDA	Mean	Std. Deviation
I am satisfied with the price of IT devices.	3.2%	25.3%	28.0%	38.9%	4.6%	2.83	0.964
I can charge my IT device at any time without getting problem of power supply	6.8%	21.4%	23.8%	44.0%	3.9%	2.83	1.028
I like using the interface of devices provided by TRA management.	12.9%	32.1%	24.3%	27.5%	3.2%	3.24	1.088
It is easy to get support from the government when I fail to do something with my device.	7.5%	21.9%	31.6%	33.8%	5.1%	2.93	1.030
The systems give error messages that clearly tell how to fix problems.	6.8%	21.7%	32.6%	34.1%	4.9%	2.91	1.010
Whenever I make a mistake when using IT device, I recover easily and Quickly, because of its simple when using.	4.6%	21.7%	28.7%	38.0%	7.1%	2.79	1.010
The information (such as on-screen messages, other documentation) provided with IT devices is clear.	8.0%	28.7%	33.3%	27.7%	2.2%	3.13	0.980
The way the information organized on the screens of devices is clear.	6.3%	31.9%	24.8%	34.5%	2.4%	3.05	1.007
I was well trained on how to use IT devices	3.6%	26.8%	29.0%	37.0%	3.6%	2.90	0.960
There is a clear IT policy which guides the users of the computer systems	5.6%	23.1%	33.1%	32.6%	5.6%	2.91	0.999

Table 6. 2: factors affecting IT service delivery

The findings from the table 6.2 above show that the majority of respondents disagree with the satisfaction of IT

devices' price by meaning the price of IT devices does not satisfy them because the price of those devices is high with a mean of 2.83 and standard deviation of 0.964. The research paper findings were in line with that of Orinda (2015) that due to the high cost of ICT equipment it limits the choice of technology from used.

Respondents get problems when charging their IT devices due to unstable power supply with a mean of 2.83 and standard deviation of 1.028. The findings above found to be consistent with that of Tossy (2014), who noted that it is important to have good bandwidth for a network connection and clean power supply to enable a smooth and satisfactory of IT implementations. In other hand, interfaces of IT devices seem to be not one among the factors affecting IT service delivery in Tanzania Revenue Authority during this research paper with the mean of 3.24 and standard deviation of 1.088.

Respondents' opinion in this finding shows that they do not get support from the government when using IT devices with a mean of 2.93 and standard deviation of 1.030. The research paper findings were in line with that of Ikua and Namusonge (2013) that some of the factors affecting the growth of Information and Communication Technology sectors are poor organisational culture and uncoordinated government support of ICT innovation. The respondents disagree with the statement of being well trained on how to use IT devices with the mean of 2.90 and standard deviation of 0.960. This meant that respondents did not get well training on the uses of IT devices, the research paper findings were in line with that of Ghobakhloo et al. (2012), who noted that lack of training and skills of IT to users always limits the use of IT in organisations. In addition, the research paper findings were in line with that of Dean and Rainnie (2009) that poor human resource management practices such as lack of motivations and training on IT devices, results to poor service delivery in an organisation.

Other factors considered by respondents of TRA were as follows: failure in fixing systems when there is an error message with the means of 2.91 and standard deviations of 1.010 by meaning it was difficult to fix computer systems wherever there was an error message. The above findings were in line with that of Delaney (2013) who argued that most of the people fail to fix their computers when they get problems when using them which results in limiting the use of IT in delivering services. Difficult to recover mistakes done when using IT devices and unclear organized information on IT devices' screens with the means of 2.79, 3.05 and standard deviations of 1.010, 1.007 respectively. However, other statements like whether the information provided with IT devices are clear and if there is an IT policy that guides the users of computer systems, the respondents remained neutral with the means of 3.13 and 2.91 respectively as summarised in table 6.2 above.

Also in an effort of identifying other factors that affect the best IT service delivery in Tanzania, the respondents gave their opinions as shown in figure 6.3.

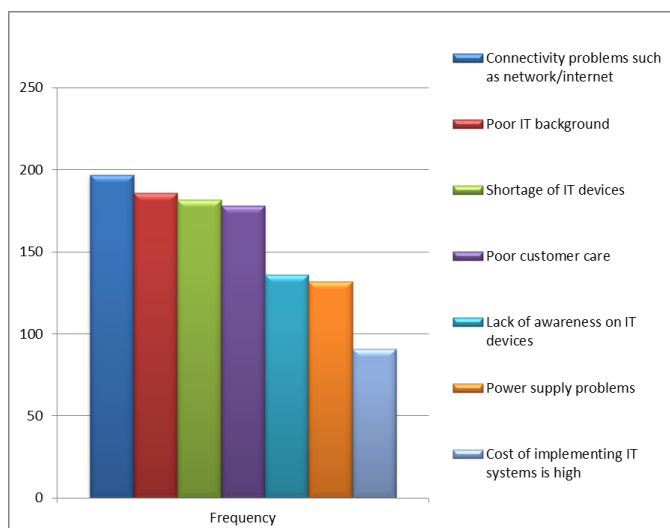


Figure 6.2: factors that affect the best IT service delivery

The finding of this research paper shows that, 197 respondents felt that connectivity problems such as network/internet have affected the best IT service delivery in Tanzania. The findings above concur with those of Tossy (2014) that poor infrastructure (technology infrastructures) like software; hardware and network should always be available in an organisation for better IT service delivery. Also the findings show that 186 respondents indicates that, poor IT background has contributed to the factors affecting the best IT service delivery in organisations of Tanzania. Shortage of IT devices was another view from 182 respondents who felt it affect the best IT service delivery, the research paper concurs with that of Tossy (2014) who noted that it is very important to have the right IT infrastructures such as PCs, servers, a good network bandwidth and stable power supply for smooth implementation of IT resources. In addition, the findings show that 178 respondents gave their views that poor customer care affects the best IT service delivery in Tanzania. Lack of awareness on IT devices contributes to factors affecting IT service delivery in Tanzania as shown in figure 6.3 by 136 respondents. The findings were in line with that of Ghobakhloo et al. (2012) who argued that the IT implementations fail due to lack of IT knowledge, skills and training resources. Power supply problem is also another factor that affects the best IT services as viewed by 132 respondents. This indicates that due to a power supply problem such as power break down, IT service delivery becomes difficult in delivering to targeted users because IT service delivery depends on the power supply. The above findings were in line with the following statement, that one of the most important components in IT devices is the power supply, without power supply, an IT device is incomplete. In addition, 91 respondents felt that due to the high cost of implementing IT systems it has contributed to the factors affecting IT service delivery. The findings concur with the research paper of Muriithi (2013), that most of the developing countries differ in the level of using ICT due to the high cost of IT devices, the internet and poor ICT experts, which hinder a government to adopt them.

Therefore, the major factors affecting IT service delivery include:

- ✓ Connectivity problem–network/internet has been a challenge to IT dependent organisations due to poor network/internet devices that fail to support IT devices in providing a strong and stable network/internet.
- ✓ Poor IT background–users of IT devices face many challenges when using IT devices because they do not have a proper IT background.
- ✓ Shortage of IT devices–this is due to the high cost of IT devices and low awareness of IT devices to users.

## V. SUMMARY AND CONCLUSION

### CONCLUSION

This presents the conclusions that drawn from the findings. The conclusions discussed in this chapter were to meet the objective of the research paper. This research paper was guided by the objective, namely to identify the factors affecting IT services delivery at the Tanzania Revenue Authority.

The research paper established that IT service delivery is highly affected by the high price of IT devices, unstable power supply for charging IT devices, as well as poor support from government on IT devices. Furthermore, the lack of awareness and training on how to use IT devices, difficult to fix systems when there is an error message, difficult to recover mistakes done when using IT devices and unclear organized information on IT devices' screens were the factors which affected IT service delivery. The research paper further established that connectivity problems such as network/internet, a shortage of IT devices, poor IT background, poor customer care, lack of awareness on IT devices, power supply problem were among the factors that affected IT service delivery.

The recommendation for further research is on Information security challenges facing IT-dependent organisations. The named areas, should researched upon in order to discover the relationship between organisations and IT service delivery in different industries that depends on IT when delivering their services.

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