Effect of It-Dependent Service Delivery in Organisations, the Case of Tanzania Revenue Authority
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Abstract:
This paper explored the effect of IT dependent service delivery at Tanzania Revenue Authority, focusing on Electronic Fiscal Devices Management System used by employees and Electronic Fiscal Devices used by customers of Tanzania Revenue Authority. The objective that guided the research paper was to establish the effects of IT-dependent services delivery at the Tanzania Revenue Authority. The researcher used descriptive research design. Target 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 such as mean and standard deviation. The research findings exposed the positive and negative effect of depending on IT when delivering services in organizations. Those positive effect include; computer systems eliminated bureaucracy and corruption, they also reduced travelling frequency to and from TRA offices. However the findings exposed the negative effect whereby it indicates that only people who can read and write use computer systems, health risk such as backache, eyes-ache and neck-ache are the source of computer systems which are used to deliver services. Due to various positive effect of IT in organizations, the research recommended that there should be special units for IT service delivery to help the users of IT devices for the benefit and growth of organizations.

Keywords: EFD, EFDMS, IT-Dependent Service and IT Service Delivery.

I. INTRODUCTION

IT Service Delivery refers to all IT services done within organisational lines, which include Information Technology architecture, data governance, project management, strategic planning, and information security and compliance metrics [1]. This information technology has known as the important infrastructure to many organizations and has the effective contribution to the organizational performance, hence consistent delivery of services [2]. It is advised that, information technology should be used in organisations because it has many activities in a business transaction, such as an exchange of information among different stakeholders on different products, ordering of products and delivery of goods and financial transactions from one place to another in a hasty manner [3]. Tanzania Revenue Authority (TRA) is an IT-dependent organization established by Act of Parliament No. 11 of 1995, and started its operations on 1 July 1996 with its mission of growing domestic revenue through improvement of voluntary tax compliance [4]. In order to complete its IT services efficiently, the Tanzania Revenue Authority (TRA) uses a number of systems including Tanzania Revenue Authority Online Taxpayer Registration Portal, Tanzania Custom Integrated System (TANCIS), Tax Return Electronic Filling System, Electronic Fiscal Devices Management System (EFDMS), and Revenue Gateway System. For this study, the researcher used Electronic Fiscal Devices Management System (EFDMS) as one of the system in the TRA that delivers IT services through improving 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 [5]. Electronic fiscal device management systems increase transparency in the termination of all receipts reviewed, also help to identify if the service is adequately provided or not and then give feedback whenever necessary [6]. While studying the effect of IT-dependent service delivery in organizations, this has undertaken place in different developed countries; little attention has gone into developing countries. Therefore, this work intends to undertake such a study in Tanzanian IT-dependent service delivery organizations by focusing on Tanzania Revenue Authority.

Problem statement
There are positive and negative effects of IT-service delivery in an organization. Such positive effects include increase an employee’s efficiency, easy in sharing information between departments, keeping and tracking financial records of the products in an organization and coordinating services [7]. Moreover, an information technology has made changes in trading, the way of communicating with other business partners and business transactions within a country and outside a country’s marketplace is the result of using information technology in an organization [8]. Negative effects of IT-dependent service delivery in an organization include forcing some of the organizations to have a high demand of skilled workforce, increasing demand to meet a customer’s hope for
customer service delivery, reliability of the information system and competition in financial services [9]. Also the users of Information Technologies (IT) are being affected by different problems which has been caused by the information technology (IT) such as an employee’s mental pressure, security of information and overcoming resistance to the use of computers [10]. Regardless of the above studies, petite consideration has been taken to some of the effect especially positive effect such as improvement of work relations, productivity and competitive improvement, profitability upgrading, performing minor repetitive tasks and removing of unnecessary use of resources in an organization. However, there are negative side effect such as a demand of skilled workforce in the organization, source of technology security risks, moral destruction especially to youth and rise of low individual performance (laziness) in an organization in which emerges for the effect of IT-dependent service delivery organizations in Tanzania. Therefore, this study was set up to explore the effect of IT-dependent service delivery organizations by focusing on Tanzania Revenue Authority (TRA). The study envisioned to establish the effects of IT-dependent services delivery organizations and come up with useful, concrete effect and suggestions, which eliminated the problem. 

This research was conducted at Tanzania Revenue Authority (TRA) Ilala Region in Dar es Salaam, Tanzania. Time scope of the study was 2016-2019, and the researcher used Model of IS Success to ground this study.

II. MATERIALS AND METHODS.

Effect of IT-dependent service delivery in organizations Positive Effect of IT-dependent service delivery in organisations

The usage of Information Technology (IT) has a constructive effect on the operations conducted in the organisation by speeding up the operations and the service delivery, productivity level and profit level of the organisation [8]. Due to the development of technology, the public, private, small and large organisations are using this technology because of its simplification of activities such as easy storage of information, producing accurate information, sharing of information and protection of information for the benefit of the organisation [11]. At the same time, [12] stated that technology has touched many areas in organisations in terms of organizing, planning, coordinating and controlling. The improvement in computational, artificial intelligence and machine learning has totally brought the new ways of performing activities in digital work places /offices and different opportunities have been opened that help an organisation to deliver better services to its customers hence the achievement of organisational goals [13].

[7] discussed that the use of Information Technology (IT) in organisations to deliver services, increase an employee’s efficiency, easy in sharing information between departments, keeping and tracking financial records of the products in an organisation and coordinating services. Therefore, the value of IT business and service delivery is an improvement of profit, the improvement of workstations, and the use of resources at an intermediate and organisational level and the enhancement of productivity. According to [8] noted that an information technology has made changes in trading, the way of communicating with other business partners and business transactions within a country and outside a country’s marketplace is the result of using information technology in an organisation. Moreover, information technology in an organisation has many benefits such as helping workers from performing minor repetitive tasks and removing of unnecessary use of resources for example paper work, faster, easy and accurate ways of performing tasks in an organisation [14]. Additionally, information technology has value to business and service delivery, such as improvement of work relations, productivity improvement, competitive improvement, profitability upgrading, and improvement of work relations and effective use of resources in organisations [15].

Negative effect of IT-dependent service delivery in organisations

An Information Technology (IT) fits only some unique requirement in businesses such as the need for quick billing and settlement of bills, electronically and specialized logistics applications and the need for product identification; this becomes very difficult to users and benefices of IT service delivery to do not enjoy the presence of technology in organisations [16]. The use of IT service delivery in organisations forces some of the organisations to have a high demand of skilled workforce, increasing demand to meet a customer’s hope for customer service delivery, reliability of the information system and competition in financial services [9]. When Information Technology is used to deliver services in the organisation, the users of these technologies are being affected by different problems which has been caused by the information technology (IT) such as an employee’s mental pressure, security of information and overcoming resistance to the use of computers [10].

Theoretical Perspectives

This research 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, those are 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 [17] as shown in figure 1.

Figure 1. Model of is success [17]

III. RESEARCH METHODOLOGY

Research design: To address the research problem, the study used descriptive research design method, in order to find out the how the study is to be done, where it done and what does the study needs.
Research 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 assisted to get the needed information that solved the problem of this research. The research population was 19 858, whereby 377 were employees and 19 481 were customers.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>19 481</td>
<td>98.1</td>
</tr>
<tr>
<td>Employees</td>
<td>377</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>19 858</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Tanzania Revenue Authority in Ilala Region (2017)

Sample size and design
The population of this research were employees and customers of Tanzania Revenue Authority (TRA) in Ilala Region. The select 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). The mentioned system improves the revenue collection in Tax Administrations and links the fiscal device example fiscal printer and cash register or Point of Sale system with the server of the Tax Authorities. It helps the Tax Administration to obtain complete information in a real time concerning the sales made from a specific fiscal device that belongs to a particular taxpayer [5]. The sample size for this research was 586 as determined by using the mathematical formula (Solvín’s formula).

<table>
<thead>
<tr>
<th>Category</th>
<th>Sample size</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>194</td>
<td>33.1</td>
</tr>
<tr>
<td>Customers</td>
<td>392</td>
<td>66.9</td>
</tr>
<tr>
<td>Total</td>
<td>586</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Tanzania Revenue Authority in Ilala Region (2017)

Sampling procedure
This research used convenience sampling to gather data from customers and simple random sampling to gather data from employees of TRA in Ilala region, the research instrument used was questionnaire to gather data from the respondents. The research 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 was a descriptive statistics. Statistical package for social sciences (SPSS) Version21 used to analyse data in this research.

IV. RESULTS AND DISCUSSIONS

Introduction
This dowries the studded results of the research built from the completed questionnaires with employees and customers of Tanzania Revenue Authority (TRA) in Ilala Region.

Sample size profile
A sample of 194 employees was haggard from the population of 377 employees at the TRA in Ilala region and similarly a sample of 392 customers was haggard from a population of 19 481 customers. The researcher used Solvín’s formula to presume sample size for employees and customers of Tanzania Revenue Authority 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.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Population</th>
<th>Sample size</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>19 481</td>
<td>392</td>
<td>65.3%</td>
</tr>
<tr>
<td>Employees</td>
<td>377</td>
<td>194</td>
<td>79.9%</td>
</tr>
<tr>
<td>Total</td>
<td>19 858</td>
<td>586</td>
<td>70.1%</td>
</tr>
</tbody>
</table>

Source: Tanzania Revenue Authority in Ilala Region (2017)

Profile information
- Respondents’ categories
The category of respondents in Tanzania Revenue Authority was asked 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 with 62.3% compared to employees with 37.7%. It indicates that both employees and customers of Tanzania Revenue Authority were involved in the study though were not in equal percentages. This might be because of the population of customers was big involved in the study 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.

![Figure.2.Respondents’ Interaction Year with Tra](http://ijesc.org/)
Quality of data
Validity
The researcher did face validity by distributing six (6) questionnaires to employees and fourteen (14) questionnaires to customers of Tanzania Revenue Authority 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 (1) expert from College of Business Education (CBE) and five (5) experts from Kampala International University in Tanzania (KIUT) to validate the questionnaires. The questionnaires were validity as the results turned to be one (1), which means the questionnaires were essential.

Effect of IT-Dependent Service Delivery
This study established the positive and negative effect of IT-dependent service delivery at the Tanzania Revenue Authority. Therefore, different respondents gave their views on effect of IT-dependent service delivery in a form of a table, some respondents strongly agree (SA), agree (A), neither agree nor disagree (neutral (N)), disagree (DA) and strongly disagree (SDA).

Table 4. Effect of it-dependent services delivery

<table>
<thead>
<tr>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>DA</th>
<th>SDA</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer systems are used only by people who can read and write</td>
<td>39.7%</td>
<td>36.9%</td>
<td>14.3%</td>
<td>3.9%</td>
<td>2.39%</td>
<td>3.99</td>
<td>1.057</td>
</tr>
<tr>
<td>IT devices, demands highly skilled people to use them</td>
<td>17.0%</td>
<td>35.3%</td>
<td>30.8%</td>
<td>10.9%</td>
<td>3.94%</td>
<td>3.10</td>
<td>1.152</td>
</tr>
<tr>
<td>Using computer system is more costly than manual methods in performing tasks.</td>
<td>11.7%</td>
<td>25.5%</td>
<td>20.2%</td>
<td>20.7%</td>
<td>11.3%</td>
<td>3.24</td>
<td>1.187</td>
</tr>
<tr>
<td>All the information provided by systems is secured and well protected</td>
<td>12.9%</td>
<td>35.0%</td>
<td>27.3%</td>
<td>11.2%</td>
<td>2.9%</td>
<td>3.44</td>
<td>0.802</td>
</tr>
<tr>
<td>I feel comfortable using IT devices in performing tasks</td>
<td>23.3%</td>
<td>40.4%</td>
<td>24.3%</td>
<td>10.5%</td>
<td>1.9%</td>
<td>2.76</td>
<td>0.965</td>
</tr>
<tr>
<td>It is easy to get the status of the work performed when using systems than using manual procedures</td>
<td>27.9%</td>
<td>36.3%</td>
<td>26.2%</td>
<td>8.5%</td>
<td>1.9%</td>
<td>3.82</td>
<td>0.019</td>
</tr>
<tr>
<td>Computer systems have eliminated bureaucracy and corruption</td>
<td>26.3%</td>
<td>35.9%</td>
<td>27.7%</td>
<td>8.2%</td>
<td>1.9%</td>
<td>2.76</td>
<td>0.994</td>
</tr>
<tr>
<td>IT devices have reduced travelling frequency to and from TRA offices</td>
<td>37.3%</td>
<td>35.5%</td>
<td>17.5%</td>
<td>7.4%</td>
<td>1.7%</td>
<td>4.00</td>
<td>0.003</td>
</tr>
<tr>
<td>It takes long time to issue a receipt by using system than using receipt book</td>
<td>15.1%</td>
<td>10.0%</td>
<td>33.8%</td>
<td>17.8%</td>
<td>15.3%</td>
<td>3.00</td>
<td>1.256</td>
</tr>
</tbody>
</table>

Table 4 regards to effect of IT-dependent service delivery, it was found out that, the majority of the respondents agreed with the mean of 3.99 and standard deviation of 1.037 that the only people who can read and write use computer systems. This means that, these computer systems prevent people who cannot read and write from using and enjoying the presence of these computer systems such as paying bills, sending and receiving reports, communicating and solving difficult calculations. The findings found that computer systems eliminated bureaucracy and corruption with a mean of 3.76 and standard deviation of 0.996. This was followed by strongly agree among respondents that IT devices have reduced travelling frequency to and from TRA offices with a mean of 4.00 and standard deviation of 0.993. Respondents also agreed to be comfortable with IT devices in performing tasks and it is easy to get the status of the work performed when using systems than using manual procedures with a mean of 3.76 and 3.82 and standard deviation of 0.965 and 0.939 respectively. On the other hand, the majority of the respondents disagreed with a mean of 3.19 and standard deviation of 1.182 that IT devices demand highly skilled people to use them; this meant that anyone who is mentally and physically fit could use IT devices. However, other effects of IT service delivery, such as using computer systems are costlier than manual methods in performing tasks and it takes a long time to issue a receipt by using system than using receipt book were neutral with a mean of 3.04, 3.00 and standard deviation of 1.187, 1.256 respectively. All the information provided by systems are secured and well protected was neutral with a mean of 3.44 and standard deviation of 0.952 as summarized from table above. The study also sought to establish other effect of IT-dependent service delivery in Tanzania Revenue Authority, the defendants gave their sentiments as summarised in figure 3.

Figure 3 indicates the respondents’ opinions on the effect of IT-dependent service delivery at Tanzania Revenue Authority. The findings of this research shows that, simplifying work is a positive effect of using computer systems, as was an opinion from 121 respondents during this study. The findings concur with that of [11] who noted that when computer systems (technologies) are used, they help in simplifying activities such as easy storage of information, producing accurate information, sharing of information and protection of information for the benefit of the organisation. Health risks such as backache, eye-ache and neck-ache are negative effect of using IT in delivering services as indicated by 118 respondents. The findings were in line with that of [20], who noted that physical problems which caused by most computer users were related to the muscles and skeleton such as backache and pain in the neck and shoulders. The responses from 96 respondents felt that when computers used in delivering services, they cause unemployment to some of the people, which mean computers replace work force in an organisation. In addition, Vulnerability was another view from 79 respondents who felt to be another effect of using IT in delivering services in Tanzania.

V. CONCLUSION
It presents the deductions that haggard from the findings. The deductions debated were to encounter the objective which guided this research namely to establish the effect of IT-dependent service delivery at the Tanzania Revenue Authority. The study
established that people who cannot read and write could not enjoy the presence of computer systems because only people who can read and write are the one who can use them. In addition, the study established that interruptions of IT services were due to vulnerabilities. Moreover, computers replaced people in organisations whereby it hindered jobs vacancies. The study established that computers caused health risks to users. However, the study established that it was comfortable to use IT devices when performing tasks because it was easy to get the status of the work performed than using manual procedures. The study also established that IT devices had reduced travelling frequency to and from TRA offices and had eliminated bureaucracy and corruption.

VI. REFERENCES


