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Impact of Human Capital Management Information System on Organization Performance: A Case of TRA Head Quarter in Dar Es Salaam

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Abstract

The study investigated three specific research objectives namely to analyses the impact of e-recruitment on the quality performance of TRA Head Quarter; to examine the impact of e-training on customer satisfaction in service delivery system at TRA Head Quarter and to analyze the impact of e-communication system on timely operational performance of TRA Head Quarter. The study employed mixed research strategy based on qualitative and quantitative analysis to investigate human capital management information system on organization performance. The case study research design was used in analyzing the study. Data was collected through questionnaire and interview, and they were analyzed using qualitative and quantitative approaches. The study observed that e-recruitment system has impacts on increases rate of handling customer complaints hence ensures quality of services delivery and increase number of staff employed hence deliver quality works. The finding shows that e-training practices at the office added value of quick response to customer using online services hence impact to customer satisfactions and increases number of staff trained as the results increases professionalism in service delivery hence impacts on customer satisfactions with service delivery. The finding indicates that use of e-communication address operational challenges as the result contribute to operational performance, reduce time taken to respond to work activities that impact of operational performance and lower operational costs in work communication. The study recommends that policy development should be aligned with application of e-human capital management system that contributes toward improving operational performance of an organization.

Keywords: Human capital, management information system, organization performance.
1. Introduction

Improving the effectiveness and efficiency of human resource management (HRM) in developing countries has been challenging. Due to the severe competition on the global market, functional, planned, and tactical strategies have had to evolve for many businesses to attain more effective and rewarding performance increases. Electronic human resource management information systems (CHRMIS) have replaced the more traditional paper-based HRMIS in a significant number of successful and aggressive businesses (Kornkaew, 2012).

Human Capital Management Information System is one of the CMIS alternatives designed specifically for human resource management. Particularly in our local government agencies, employee information is kept utilizing HCMIS (LGAs). It guarantees that the organization obtains all required and thorough information on time while lowering expenses (Kassam, 2013). Successful HCMIS extends well beyond handling wages and tracking bonus periods for workers. This focuses on demand forecasting, labor force utilization, recruiting, and retaining the best workers to accomplish the organization's goals. To arrive at strategic conclusions, the synchronization of all operations and facilities, both in terms of the persons involved and their performance, should be given top priority. Its primary objective is to improve the market, capabilities, and success of any confined regime so that it can provide improved services to the whole of its population (Hur, 2007).

As part of the Public Service Reform Program, HCMIS was originally introduced in Tanzania in 1995. (PSRP). Management of human capital inside an organization requires it. The Tanzanian government has adopted a Human Resources Information System (HRIS) in the public sector during the last decade to solve issues associated with the usage of manual methods, such as payroll fraud (ghost employees), corruption, high turnover, and untrained civil personnel (Annual report, 2011). This structure enhances professionalism, quality control, output assessment, consumption as well as instructional projections, selection and replacement, and professionalism. HCMIS enhances management abilities and generates reports that aid in decision-making (DeSanctis, 1986). In the late 1980s, the government of Tanzania initiated a Civil Service Reform Program in response to the country's deteriorating economy and the subpar performance of its public services.

Inadequate planning, lackluster performance, and the inability to accurately estimate the company's future human resource requirements are only some of the problems. HCMIS has been adopted by Tanzania Revenue Authority (TRA). In Tanzania, however, little study had been conducted on the implications of the newly adopted computerized MIS. Consequently, the objective of this research was to investigate if the deployment of the HCMIS, also known as LAWSON, version 9, had any discernible or significant influence on Tanzania Revenue Authority (TRA) performance.

personnel resource administration A company's human resources must be properly managed for optimal production, and an information system is vital to achieving this goal. Since its inception, HCMIS has apparently been the essential instrument for enhancing a company's competitive advantages over rivals since the system promotes organizational effectiveness in a methodical manner. Using Lawson Version 9, HCMIS allows human resource professionals to manage information and make any required changes, including
employee transfers, promotions, changes to personal information, terminations, and status modifications (Human Resource Manual, 2016). Since the middle of the 1990s, the Tanzanian government has been constructing a series of courses to alter and improve its inhabitants' lives. The Public Sector Reform Program (PSRP) is predominately made up of a Management Information System (MIS) component to lay the groundwork for electronic governance. Recent research has shown, however, that electronic systems are more precise, absolute, and accessible than paper files. One study in Indiana found that electronic medical records were 40% more comprehensive and 20% quicker to obtain than paper data (Tsai et al., 2007). Consequently, the purpose of this research was to determine whether the implementation of an electronic information system known as LAWSON as a representative sample of government workers.

2. Material and Method

This section describes the methodological approach which was used in the study. The research design, study region, population of the study, sample size and sampling processes, data collecting tools, and analysis methodologies are all included in this component.

3. Research Strategies

During the study the researcher used case study design which focused on finding extensive information and provides answers to the question of what the impacts of e-HRMS on organization performance at TRA Head Quarter are. The case study approach allowed the researcher to get acquainted with the occurrence, resulting in efficient data collection. According to Wiersma and Jurs (2009), the case study approach permits the adaptability of data gathering methods and procedures from a range of sources in a short period of time and with little budgetary repercussions to fit the research. Based on this benefit it was seen use of this research design facilitated effective and timely accomplishment of research work. In addition to that, the researcher adopted both qualitative and quantitative research approaches in analyzing impact of e-HRMS on performance of an organization. The researcher this mixed approach in order to get both narrations about the study problem and test hypothesis using quantitative approach.

3.1.1 Survey Population

The study population is referred to the total number of respondents that the researcher requires getting information (Kumar, 1999). The targeted survey population of study consisted total number 235 employees in different categories such as Commissioner General, Deputy Commissioner General’s, Commissioners, directors, deputy directors, head of sections, human resources officers from administrative general, and other staff from different department and sections from TRA Head Quarter as presented in Table 3.1.

| S/n | Categories of respondents          | Total population |
|-----|-----------------------------------|------------------|
| 1   | Commissioner General              | 1                |
| 2   | Deputy Commissioner General       | 1                |
3.1.2 Area of the Research

TRA Head Quarter was selected among all other TRA branches because it’s controlling all branches and new recruited staff. Therefore, the researcher wished to determine whether workers are familiar with the management information system, namely Lawson version 9. The purpose of the research was to determine the effect of e-HRMS on organizational performance.

3.2 Sampling Design and Procedures

Before narrating sample size and sample procedure it is important to determine sample size. Sample size is number of elements selected from the targeted population. Sample size in this study was calculated using simple formula as follows:

\[ n = \frac{N}{1 + e^2 \times N} \]

were

\( n = \) sample size
\( N = \) Targeted Population (235)
\( e = \) margin error (0.06)

Thus \( n = 235/(1+0.06^2 \times 235) \)

Therefore, sample size was 127 participants.

After knowing the sample size, it is important to understand how sample was selected. During the study, the researcher opted simple random sampling as well as purposive sampling to sample the targeted study population.

3.4 Variables and Measurement Procedures

This section demonstrates variables that were used in the study and their measurement process to get accurate data suitable for the study. It helps to know which data was collected from the participants as well as sources of such data. Table 3.1 demonstrate variable and measurement.

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|     |                              |     |
|-----|------------------------------|-----|
| 3   | Commissioners                | 4   |
| 4   | Directors                    | 5   |
| 5   | Deputy Directors             | 3   |
| 6   | Heads of section             | 10  |
| 7   | Human Resource Officers from Administration Departments | 12 |
| 8   | Other Staff from TRA         | 199 |
| **Total** |                                | **235** |
Table 2. Variable and measurement procedures

| Variable                        | Types of variables | Meaning                                                                 | Measurement of variable | Data collection instrument | Source                     |
|---------------------------------|--------------------|-------------------------------------------------------------------------|--------------------------|----------------------------|-----------------------------|
| e-recruitment and selection     | Independent        | Publication of job openings Publication on the firms' websites or an online seller recruiting website that enables candidates to electronically submit their CVs (Via E-Mails or using any other mean of electronic forms) | (a) The system in place  | Questionnaire and interview | Participants response       |
|                                 |                    |                                                                         | (b) The use of system    |                            |                             |
| e-training                      | Independent        | Internet use in training and development                               | (a) The system in place  | Questionnaire and interview | Participants response       |
|                                 |                    |                                                                         | (b) The use of system    |                            |                             |
|                                | independent        | Staff communication via electronic mails or electronic devices         | (a) The system in place  | Questionnaire and interview | Participants response       |
|                                 |                    |                                                                         | (b) The use of system    |                            |                             |
| Quality performance             | Dependent          | How well the product functions or service performs when put to use     | • Quality design         | Questionnaire              | Participants response       |
|                                 |                    |                                                                         | • Quality conformant     |                            |                             |
| Customer satisfaction           | Dependent          | How happy customers are with a company's products, services, and capabilities | Customer survey reports  | Documentary review and questionnaire | Customer survey report Participants response |
|                                 |                    |                                                                         |                          |                            |                             |
| Timely operational performance  | Dependent          | How long does it take to achieve performance of the company against prescribed standards | Time it takes to achieve performance | Questionnaire              | Participants response       |

3.5 Data Processing and Analysis

The study employed both qualitative and quantitative data analysis approaches in order to answer the questions related with what the impacts of e-HRMS on organization performance are. The data that was collected using interview was analysed qualitatively using content
analysis. The feedback of the respondent was looked according to theme of the study and analyse it to answer the research questions. The data that was collected using questionnaire was coded through SPSS and they were analysed using descriptive statistics particular percent of observations, mean score value and standard deviation and simple linear regression analysis to test the hypothesis.

3. Result and Discussion

3.1 Finding Related with Research Objectives

This section provide finding related with three specific objectives namely the impact of e-recruitment on the quality performance of TRA Head Quarter; the impact of e-training on customer satisfaction in service delivery system at TRA Head Quarter; and the impact of e-communication system on timely operational performance of TRA Head Quarter. The finding for each specific objective is presented using descriptive statistics as well as inferential analysis to test the hypothesis of the study. The findings are well discussed with literature review presented in chapter two. The findings related to those specific objectives are presented in the following sub sections.

3.1.1 Specific Objective 1: The impact of e-recruitment on the quality performance of TRA Head Quarter

The study investigated the impact of e-recruitment on the quality performance of TRA Head Quarter. The respondents were asked to rate their level of agreements on whether there is use of e-recruitment system at TRA; if it exists is it effective and what are their impacts in terms of increasing number of staff employed as well as increasing rate of handling customers. The descriptive statistic findings are presented at Table 3.

Table 3. Descriptive Statistics impact of e-recruitment on the quality performance of TRA

|                                | Strongly disagree | Disagree | Neutral | Agree     | Strongly agree | Mean | Std. Deviation |
|--------------------------------|-------------------|----------|---------|-----------|---------------|------|---------------|
| The e-recruitment system is in place at TRA Head Office | 1(0.8%)           | 1(0.8%)  | 5(4.0%) | 99(79.2%) | 19(15.2%)     | 4.07 | .541          |
| I think there is an effective use of e-recruitment system at TRA head office | 0(0%)             | 15(12%)  | 36(28.8%) | 62(49.6%) | 12(9.6%)     | 3.57 | .826          |
| I think the use of e-recruitment has impacts on increase number of staff employed | 0(0%)             | 8(6.4%)  | 18(14.4%) | 94(75.2%) | 5(4.0%)      | 3.77 | .624          |
I think adoption of e-recruitment increases rate of handling customer complaints on quality of services delivery

| Percentage | 0(0%) | 3(2.4%) | 22(17.6%) | 100(80.0%) | 0(0%) | 3.78 | .473 |

**Source:** Survey Data at TRA Head Office (2021)

The study was interested to know whether there is e-recruitment system is in place at TRA Head Office. Respondents were asked to rate their level of agreement if e-recruitment system is in place at TRA Head Office. The result through Table 4.1 shows that, 99 participants equivalent to 79.2 percents agreed that e-recruitment system is in place at TRA Head Office; 19 participants equivalent to 15.2 percents strongly agree on it; 5 participants equivalent to 4.0 percents were neutral on it; 1 participant equivalent to 0.8 percent disagree on it and 1 participant equivalent to 0.8 percent strongly disagree on it. The finding indicates that 94.4 percents of participants agree on e-recruitment system is in place at TRA Head Office while only 1.6 percent of participants disagree on it. On the other hand e-recruitment system is in place at TRA Head Office has mean score value 4.0 and standard deviation 0.541 implying that in average participants agree that e-recruitment system is in place at TRA Head Office. With this finding we can conclude that e-recruitment system is in place at TRA Head Office.

The study was interested to know if e-recruitment system at TRA Head Office is effective. Respondents were asked to rate their level of agreement on effectiveness of e-recruitment system at TRA Head Office. The result through Table 4.1 shows that, 62 participants equivalent to 49.6 percents agreed that there is an effective use of e-recruitment system at TRA head office; 12 participants equivalent to 9.6 percents strongly agree on it; 36 participants equivalent to 28.8 percents were neutral on it; 15 participant equivalents to 12 percent disagree on it and 0 participant equivalent to 0 percent strongly disagree on it. The finding indicates that 59.2 percents of participants agree on there is an effective use of e-recruitment system at TRA head office while only 12 percent of participants disagree on it. On the other hand there is an effective use of e-recruitment system at TRA head office has mean score value 3.57 and standard deviation 0.826 implying that in average participants agree that there is an effective use of e-recruitment system at TRA head office. With this finding we can conclude that there is an effective use of e-recruitment system at TRA head office.

The study investigated whether e-recruitment systemhas impacts on increase number of staff employed hence deliver quality works. Respondents were asked to rate their level of agreement if e-recruitment system has impacts on increased number of staff employed hence deliver quality works. The result through Table 4.1 shows that, 95 participants equivalent to 75.2 percents agreed that e-recruitment system has impacts on increased number of staff employed hence deliver quality works; 5 participants equivalent to 4.0 percents strongly agree
on it; 18 participants equivalent to 14.4 percents were neutral on it; 8 participant equivalent to 6.4 percent disagree on it and 0 participant equivalent to 0 percent strongly disagree on it. The finding indicates that 79.2 percents of participants agree on e-recruitment system has impacts on increase number of staff employed hence deliver quality work while only 6.4 percent of participants disagree on it. On the other hand e-recruitment system has impacts on increase number of staff employed hence deliver quality works has mean score value 3.77 and standard deviation 0.624 implying that in average participants agree that e-recruitment system has impacts on increase number of staff employed hence deliver quality works. With this finding we can conclude that e-recruitment system has impacts on increase number of staff employed hence deliver quality works.

The study investigated whether e-recruitment system has impacts on increases rate of handling customer complaints hence ensures quality of services delivery. Respondents were asked to rate their level of agreement if e-recruitment system has impacts on increases rate of handling customer complaints hence ensures quality of services delivery. The result through Table 4.1 shows that, 100 participants equivalent to 80 percents agreed that e-recruitment system has impacts on increases rate of handling customer complaints hence ensures quality of services delivery; 0 participants equivalent to 0 percents strongly agree on it; 22 participants equivalent to 17.6 percents were neutral on it; 3 participant equivalent to 2.4 percent disagree on it and 0 participant equivalent to 0 percent strongly disagree on it. The finding indicates that 80.0 percents of participants agree on e-recruitment system has impacts on increases rate of handling customer complaints hence ensures quality of services delivery while only 2.4 percent of participants disagree on it. On the other hand e-recruitment system has impacts on increases rate of handling customer complaints hence ensures quality of services delivery has mean score value 3.78 and standard deviation 0.473 implying that in average participants agree that e-recruitment system has impacts on increases rate of handling customer complaints hence ensures quality of services delivery. With this finding we can conclude that e-recruitment system has impacts on increases rate of handling customer complaints hence ensures quality of services delivery.

The finding from this study indicates that e-recruitment system has impacts on increases rate of handling customer complaints hence ensures quality of services delivery and increase number of staff employed hence deliver quality works. The finding from this study related with Felix et al., (2019) who conducted a study assessing the impact of e-human resource management system on organisational performance and observed that e-HRM practices influence the employee’s attitudes and behaviour toward organisational performance, like productivity, quality and innovation that successively have a positive effect on organisational performance.

In addition to that the finding from this study related with Hezron (2019) who conducted a study assessing the impact of e-HRMS on performance of banking industry in UK and observed that e-HRMS has been significantly contributes toward improving operational performance in terms of time management of works, cost effectiveness as well as customer satisfaction in service delivery.

3.3.1.1 Hypothesis Testing

The study had proposed hypothesis saying e-recruitment and selection have no significant impact on quality performance of TRA Head Quarter. The study investigated simple linear regression analysis to test the hypothesis. The result obtained is presented at Table 4.
Table 4. Regression Result e-recruitment on quality service delivery

Model Summary

| Model | R   | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-----|----------|-------------------|---------------------------|
| 1     | .187<sup>a</sup> | .335     | .227              | .666                      |

a. Predictors: (Constant), The e-recruitment system is in place at TRA Head Office

ANOVA<sup>a</sup>

| Model     | Sum of Squares | df | Mean Square | F            | Sig. |
|-----------|----------------|----|-------------|--------------|------|
| Regression| 1.986          | 1  | 1.986       | 4.471        | .036<sup>b</sup> |
| Residual  | 54.622         | 123| .444        |              |      |
| Total     | 56.608         | 124|             |              |      |

b. Dependent Variable: There is quality service delivery at TRA head Office

Coefficients<sup>a</sup>

| Model                | Unstandardized Coefficients | Standardized Coefficients | t     | Sig.   |
|----------------------|-----------------------------|---------------------------|-------|--------|
| (Constant)           |                             |                           | 4.896 | .454   |       |       |
| 1                    | The e-recruitment system is in place at TRA Head Office | -.234 | .111 | -.187 | -2.115 | .036  |

a. Dependent Variable: There is quality service delivery at TRA head Office

Source: Survey Data at TRA Head Office (2021)

Table 4.2 shows that R-square is 0.335 implying that e-recruitment system is in place at TRA Head Office has 33.5 percent ability to explain there is quality service delivery at TRA head Office and the remaining 66.5 percent is explained by other variables not used in this study. The AVOVA table shows F-value is 4.471 at p=0.036 implying that independent variable is significant to explain dependent variable. Furthermore, coefficient table shows that e-recruitment system is in place at TRA Head Office has coefficient -0.234 and t-value -2.115 at p=0.036. The finding imply that e-recruitment system is in place at TRA Head Office is significantly explaining changes in quality service delivery at TRA head Office because p<0.05. Based on this result we reject the hypothesis stated that e-recruitment and selection have no significant impact on quality performance of TRA Head Quarter and accept e-recruitment and selection have significant impact on quality performance of TRA Head Quarter.

3.3.2 Specific Objective 2: The impact of e-training on customer satisfaction in service delivery system at TRA Head Quarter
The study investigated the impact of e-training on customer satisfaction in service delivery system at TRA Head Quarter. The respondents were asked to rate their level of agreements on whether there is use of e-training at TRA; if it exists, is it effective and what are their impacts in terms of increases number of staff trained as the results increases professionalism in service delivery hence impacts on customer satisfactions with service delivery and adds value of quick response to customer using online services hence impact to customer satisfactions. The descriptive statistic findings are presented at Table 5.

Table 5. Descriptive Statistics of e-training on customer satisfaction at TRA

|                                                                 | Strongly disagree | Disagree | Neutral | Agree       | Strongly agree | Mean  | Std. Deviation |
|-----------------------------------------------------------------|-------------------|----------|---------|-------------|----------------|-------|----------------|
| There is e-training system at TRA Head Office                    | 0(0%)             | 0(0%)    | 15(12%) | 73(58.4%)   | 37(29.6%)      | 4.18  | .623           |
| There is effective use of e-training system at TRA head Office   | 0(0%)             | 9(7.2%)  | 29(23.2%) | 83(66.4%)   | 4(3.2%)        | 3.66  | .661           |
| The use of e-training increases number of staff trained as the   | 0(0%)             | 4(3.2%)  | 16(12.8%) | 91(72.8%)   | 14(11.2%)      | 3.92  | .604           |
| results increases professionalism in service delivery hence      |                   |          |         |             |                |       |                |
| impacts on customer satisfactions with service delivery          |                   |          |         |             |                |       |                |
| I think e-training practices at the office added value of quick  | 0(0%)             | 7(5.6%)  | 23(18.4%) | 91(72.8%)   | 4(3.2%)        | 3.74  | .611           |
| response to customer using online services hence impact to      |                   |          |         |             |                |       |                |
| customer satisfactions                                          |                   |          |         |             |                |       |                |

Source: Survey Data at TRA Head Office (2021)

The study was interested to know whether there is e-training system at TRA Head Office. Respondents were asked to rate their level of agreement if there is e-training system at TRA Head Office. The result through Table 4.3 shows that, 73 participants equivalent to 58.4 percent agreed that there is e-training system at TRA Head Office; 37 participants equivalent to 29.6 percent strongly agree on it; 15 participants equivalent to 12 percent were neutral on it; 0 participant equivalent to 0 percent disagree on it and 0 participant equivalent to 0 percent
strongly disagree on it. The finding indicates that 88 percents of participants agree on there is e-training system at TRA Head Office while only 0 percent of participants disagree on it. On the other hand there is e-training system at TRA Head Office has mean score value 4.18 and standard deviation 0.623 implying that in average participants agree that there is e-training system at TRA Head Office. With this finding we can conclude that e there is e-training system at TRA Head Office.

The study was interested to know if e-training system at TRA Head Office is effective. Respondents were asked to rate their level of agreement on effectiveness of e-training system at TRA Head Office. The result through Table 4.3 shows that, 83 participants equivalent to 66.4 percents agreed that there is effective use of e-training system at TRA head Office; 4 participants equivalent to 3.2 percents strongly agree on it; 29 participants equivalent to 23.2 percents were neutral on it; 9 participant equivalent to 7.2 percent disagree on it and 0 participant equivalent to 0 percent strongly disagree on it. The finding indicates that 69.6 percents of participants agree on there is effective use of e-training system at TRA head Office while only 7.2 percent of participants disagree on it. On the other hand there is effective use of e-training system at TRA head Office has mean score value 3.66 and standard deviation 0.661 implying that in average participants agree that there is effective use of e-training system at TRA head Office. With this finding we can conclude that there is effective use of e-training system at TRA head Office.

The study investigated whether e-training has impacts on increases number of staff trained as the results increases professionalism in service delivery hence impacts on customer satisfactions with service delivery. Respondents were asked to rate their level of agreement if e-training has impacts on increases number of staff trained as the results increases professionalism in service delivery hence impacts on customer satisfactions with service delivery. The result through Table 4.3 shows that, 91 participants equivalent to 72.8 percents agreed that e-training has impacts on increases number of staff trained as the results increases professionalism in service delivery hence impacts on customer satisfactions with service delivery; 14 participants equivalent to 11.2 percents strongly agree on it; 16 participants equivalent to 12.8 percents were neutral on it; 4 participant equivalent to 3.2 percent disagree on it and 0 participant equivalent to 0 percent strongly disagree on it. The finding indicates that 84 percents of participants agree on e-training has impacts on increases number of staff trained as the results increases professionalism in service delivery hence impacts on customer satisfactions with service deliverywhile only 3.2 percent of participants disagree on it. On the other hand e-training has impacts on increases number of staff trained as the results increases professionalism in service delivery hence impacts on customer satisfactions with service delivery has mean score value 3.92 and standard deviation 0.604 implying that in average participants agree that e-training has impacts on increases number of staff trained as the results increases professionalism in service delivery hence impacts on customer satisfactions with service delivery. With this finding we can conclude that e-training has impacts on increases number of staff trained as the results increases professionalism in service delivery hence impacts on customer satisfactions with service delivery.

The study investigated whether e-training practices at the office added value of quick response to customer using online services hence impact to customer satisfactions. Respondents were asked to rate their level of agreement if e-training practices at the office added value of quick response to customer using online services hence impact to customer satisfactions. The result through Table 4.3 shows that, 91 participants equivalent to 72.8
percents agreed that e-training practices at the office added value of quick response to customer using online services hence impact to customer satisfactions; 4 participants equivalent to 3.2 percents strongly agree on it; 23 participants equivalent to 18.4 percents were neutral on it; 7 participant equivalent to 5.6 percent disagree on it and 0 participant equivalent to 0 percent strongly disagree on it. The finding indicates that 76 percents of participants agree on e-training practices at the office added value of quick response to customer using online services hence impact to customer satisfactions while only 5.6 percent of participants disagree on it. On the other hand e-training practices at the office added value of quick response to customer using online services hence impact to customer satisfactions has mean score value 3.74 and standard deviation 0.611 implying that in average participants agree that e-training practices at the office added value of quick response to customer using online services hence impact to customer satisfactions. With this finding we can conclude that e-training practices at the office added value of quick response to customer using online services hence impact to customer satisfactions.

The finding from this study indicates that e-training practices at the office added value of quick response to customer using online services hence impact to customer satisfactions and increases number of staff trained as the results increases professionalism in service delivery hence impacts on customer satisfactions with service delivery. The finding from this study related with Felix et al., (2019) who conducted a study assessing the impact of e-human resource management system on organisational performance and observed that e-HRM practices have an effect on the employee’s attitudes and behaviour toward organisational performance, like productivity, quality and innovation that successively have a positive effect on organisational performance.

In addition to that the finding from this study related with Hezron (2019) who conducted a study assessing the impact of e-HRMS on performance of banking industry in UK and observed that e-HRMS has been significantly contributes toward improving operational performance in terms of time management of works, cost effectiveness as well as customer satisfaction in service delivery.

Furthermore, Clegg (2000) proposed that an organization can adopts more integrated set of criteria of the technology that must link systems users, managers, and designers within the organization in order to ensure the system is more effective in realising organization goals and facilitate customer satisfactions. The e-HRMS has been develop in supporting linkage between different stakeholders in human resources management which is useful to achieve desired goals of establishing adoption of technology in managing human resources for achieving customer satisfactions.

### 3.3.2.1 Hypothesis Testing

The study had proposed hypothesis saying e-training have no significant impact on customer satisfaction in service delivery of TRA Head Quarter. The study investigated simple linear regression analysis to test the hypothesis. The result obtained is presented at Table 4.4.

**Table 6. Regression Result e-training on customer satisfactions**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---|----------|-------------------|----------------------------|

37 | Page
a. Predictors: (Constant), There is e-training system at TRA Head Office

**ANOVA**

| Model         | Sum of Squares | df | Mean Square | F     | Sig. |
|---------------|----------------|----|-------------|-------|------|
| Regression    | 7.394          | 1  | 7.394       | 5.184 | .025b|
| Residual      | 175.438        | 123| 1.426       |       |      |
| Total         | 182.832        | 124|             |       |      |

a. Dependent Variable: There is customer satisfaction at TRA head office

**Coefficients**

| Model                          | Unstandardized Coefficients | Standardized Coefficients | t    | Sig. |
|--------------------------------|-----------------------------|---------------------------|------|------|
| (Constant)                     |                             |                           |      |      |
| There is e-training system at TRA Head Office | -.392                      | -.201                     | -2.277 | .025 |

a. Dependent Variable: There is customer satisfaction at TRA head office

**Source:** Survey Data at TRA Head Office (2021)

Table 4.4 shows that R-square is 0.240 implying that e-training system at TRA Head Office has 24 percent ability to explain there is a customer satisfaction at TRA head office and the remaining 76 percent is explained by other variables not used in this study. The AVOVA table shows F-value is 5.184 at p=0.025 implying that independent variable is significant to explain dependent variable. Furthermore, coefficient table shows that there is e-training system at TRA Head Office has coefficient -0.392 and t-value -2.277 at p=0.025. The finding imply that there is e-training system at TRA Head Office is significantly explaining changes in there is customer satisfactions at TRA head office because p<0.05. Based on this result we reject the hypothesis stated that e-training have no significant impact on customer satisfaction in service delivery of TRA Head Quarter and accept e-training have significant impact on customer satisfaction in service delivery of TRA Head Quarter.

3.3.3 Specific Objective 3: The impact of e-communication system on timely operational performance of TRA Head Quarter

The study investigated the impact of e-communication system on timely operational performance of TRA Head Quarter. The respondents were asked to rate their level of agreements on whether there is use of e-communication at TRA; if it exists is it effective and what are their impacts in terms of reduces time taken to respond to work activities hence impact on operational performance, lowers operational costs in work communication at TRA head Office and address operational challenges as the result contribute to operational performance. The descriptive statistic findings are presented at Table 4.5.
Table 4.5: Descriptive Statistics of e-communication on operational performance at TRA

|                                                                 | Strongly disagree | Disagree | Neutral | Agree          | Strongly agree | Mean  | Std. Deviation |
|-----------------------------------------------------------------|------------------|----------|---------|----------------|----------------|-------|----------------|
| There is e-communication system at TRA head office               | 0(0%)            | 0(0%)    | 1(0.8%) | 74(59.2%)      | 50(40.0%)      | 4.39  | .506           |
| There is effective use of e-communication system at TRA head Office | 0(0%)            | 3(2.4%)  | 13(10.4%) | 97(77.6%)  | 12(9.6%)      | 3.94  | .543           |
| I think the use of e-communication reduces time taken to respond to work activities hence impact on operational performance | 0(0%)            | 0(0%)    | 51(40.8%) | 71(56.8%)  | 3(2.4%)       | 3.62  | .536           |
| I think the use e-communications lowers operational costs in work communication at TRA head Office | 3(2.4%)          | 5(4.0%)  | 17(13.6%) | 62(49.6%)  | 38(30.4%)     | 4.02  | .907           |
| I think use of e-communication address operational challenges as the result contribute to operational performance | 0(0%)            | 6(4.8%)  | 27(21.6%) | 67(53.6%)  | 25(20.0%)     | 3.89  | .775           |

Source: Survey Data at TRA Head Office (2021)

The study was interested to know whether there is e-communication system at TRA head office. Respondents were asked to rate their level of agreement if there is e-communication system at TRA head office. The result through Table 4.5 shows that, 74 participants equivalent to 59.2 percents agreed that there is e-communication system at TRA head office; 50 participants equivalent to 40.0 percents strongly agree on it; 1 participants equivalent to 0.8 percents were neutral on it; 0 participant equivalent to 0 percent disagree on it and 0 participant equivalent to 0 percent strongly disagree on it. The finding indicates that 99.2 percents of participants agree on there is e-communication system at TRA head office while 0 percent of participants disagree on it. On the other hand there is e-communication system at TRA head office has mean score value 4.39 and standard deviation 0.506 implying that in average...
participants agree that there is e-communication system at TRA head office. With this finding we can conclude that there is e-communication system at TRA head office.

The study was interested to know if there is effective use of e-communication system at TRA head Office. Respondents were asked to rate their level of agreement on effective use of e-communication system at TRA head Office. The result through Table 4.4 shows that, 97 participants equivalent to 77.6 percents agreed that there is effective use of e-communication system at TRA head Office; 12 participants equivalent to 9.6 percents strongly agree on it; 13 participants equivalent to 10.4 percents were neutral on it; 3 participant equivalent to 2.4 percent disagree on it and 0 participant equivalent to 0 percent strongly disagree on it. The finding indicates that 87.2 percents of participants agree on there is effective use of e-communication system at TRA head Office while only 2.4 percent of participants disagree on it. On the other hand there is effective use of e-communication system at TRA head Office has mean score value 3.94 and standard deviation 0.543 implying that in average participants agree that there is effective use of e-communication system at TRA head Office. With this finding we can conclude that there is effective use of e-communication system at TRA head Office.

The study investigated whether the use of e-communication reduces time taken to respond to work activities hence impact on operational performance. Respondents were asked to rate their level of agreement if the use of e-communication reduces time taken to respond to work activities hence impact on operational performance. The result through Table 4.4 shows that, 71 participants equivalent to 56.8 percents agreed that the use of e-communication reduces time taken to respond to work activities hence impact on operational performance; 3 participants equivalent to 2.4 percents strongly agree on it; 51 participants equivalent to 40.8 percents were neutral on it; 0 participant equivalent to 0 percent disagree on it and 0 participant equivalent to 0 percent strongly disagree on it. The finding indicates that 59.2 percents of participants agree on the use of e-communication reduces time taken to respond to work activities hence impact on operational performance while only 0 percent of participants disagree on it. On the other hand the use of e-communication reduces time taken to respond to work activities hence impact on operational performance has mean score value 3.62 and standard deviation 0.536 implying that in average participants agree that the use of e-communication reduces time taken to respond to work activities hence impact on operational performance. With this finding we can conclude that the use of e-communication reduces time taken to respond to work activities hence impact on operational performance.

The study investigated whether the use e-communications lowers operational costs in work communication at TRA head Office. Respondents were asked to rate their level of agreement if the use e-communications lowers operational costs in work communication at TRA head Office. The result through Table 4.4 shows that, 62 participants equivalent to 49.6 percents agreed that the use e-communications lowers operational costs in work communication at TRA head Office; 38 participants equivalent to 30.4 percents strongly agree on it; 17 participants equivalent to 13.6 percents were neutral on it; 5 participant equivalent to 4.0 percent disagree on it and 3 participant equivalent to 2.4 percent strongly disagree on it. The finding indicates that 80 percents of participants agree on the use e-communications lowers operational costs in work communication at TRA head Office while only 6.4 percent of participants disagree on it. On the other hand the use e-communications lowers operational costs in work communication at TRA head Office has mean score value 4.02 and standard deviation 0.907 implying that in average participants agree that the use e-communications lowers operational costs in work
communication at TRA head Office. With this finding we can conclude that the use of e-communications lowers operational costs in work communication at TRA head Office.

The result through Table 4.4 shows that, 67 participants equivalent to 53.6 percents agreed that the use of e-communication address operational challenges as the result contribute to operational performance; 25 participants equivalent to 20.0 percents strongly agree on it; 27 participants equivalent to 21.6 percents were neutral on it; 6 participant equivalent to 4.8 percent disagree on it and 0 participant equivalent to 0 percent strongly disagree on it. The finding indicates that 73.6 percents of participants agree on the use of e-communication address operational challenges as the result contribute to operational performance while only 4.8 percent of participants disagree on it. On the other hand the use of e-communication address operational challenges as the result contribute to operational performance has mean score value 3.89 and standard deviation 0.775 implying that in average participants agree that the use of e-communication address operational challenges as the result contribute to operational performance. With this finding we can conclude that the use of e-communication address operational challenges as the result contribute to operational performance.

The finding from this study indicates that use of e-communication address operational challenges as the result contribute to operational performance, reduce time taken to respond to work activities that impact of operational performance and lower operational costs in work communication. The finding from this study related with Kalikawe (2016) who conducted a study on assessment of the effectiveness of HRIS in Parastatal Organization in Tanzania found out that one of the major reasons of low use of information system is led by poor interaction of people and technology. The study observed that senior managers made less usage of the schemes as they much relied on their subordinates to provide them with manuscript reports and review, this scenario appeared to work against the goal of IS. The study points out the use of e-communication result into reduction of time taken to provide services and lower the operational costs.

In addition to that the finding from this study related with Hezron (2019) who conducted a study assessing the impact of e-HRMS on performance of banking industry in UK and observed that e-HRMS has been significantly contributes toward improving operational performance in terms of time management of works, cost effectiveness as well as customer satisfaction in service delivery. Furthermore; Clegg (2000) proposed that an organization can adopts more integrated set of criteria of the technology that must link systems users, managers, and designers within the organization in order to ensure the system is more effective in realising organization goals and facilitate customer satisfactions. The e-HRMS has been develop in supporting linkage between different stakeholders in human resources management which is useful to achieve desired goals of establishing adoption of technology in managing human resources for achieving customer satisfactions.

### 3.3.3.1 Hypothesis Testing

The study had proposed hypothesis saying e-communication system has no significant impact on timely operational performance of TRA Head Quarter. The study investigated simple linear regression analysis in order to test the hypothesis. The result obtained is presented at Table 4.5.

**Table 7. Regression Result of e-communication on operational performance**
Table 4.5 shows that R-square is 0.407 implying that e-communication system at TRA head Office has 33.9 percent ability to explain there is time operational performance at TRA head office and the remaining 66.1 percent is explained by other variables not used in this study. The ANOVA table shows F-value is 4.971 at p=0.028 implying that independent variable is significant to explain dependent variable. Furthermore, coefficient table shows that there is e-communication system at TRA head Office has coefficient 0.407 and t-value 2.230 at p=0.028. The finding imply that there is e-communication system at TRA head Office is significantly explaining changes in there is time operational performance at TRA head office because p<0.05. Based on this result we reject the hypothesis stated that e-communication system has no significant impact on timely operational performance of TRA Head Quarter and accept alternative hypothesis saying e-communication system has significant impact on timely operational performance of TRA Head Quarter.

5. Conclusion, Implication, and Recommendation

The study investigated three specific research objective namely to analyse the impact of e-recruitment on the quality performance of TRA Head Quarter; to examine the impact of e-training on customer satisfaction in service delivery system at TRA Head Quarter and to analyse the impact of e-communication system on timely operational performance of TRA Head Quarter. The review of literature was conducted to link the relationship between e-
recruitment, e-training, and e-communication on organization performance at Tanzania Revenue Authority. Through literature review discussion based on result was dealt well.

The study employed mixed research strategy based on qualitative and quantitative analysis in order to investigate human capital management information system on organization performance a case of TRA head quarter in Dar es Salaam. The case study research design was used in analysing the study. Single case study of Tanzania Revenue Authority was used in analysing the study problem. Data was collected through questionnaire and interview and they were analysed using qualitative and quantitative approaches.

The study observed that e-recruitment system has impacts on increases rate of handling customer complaints hence ensures quality of services delivery and increase number of staff employed hence deliver quality works. Furthermore; the study observed that e-recruitment system is in place at TRA Head Office has coefficient -0.234 and t-value -2.115 at p=0.036. The finding imply that e-recruitment system is in place at TRA Head Office is significantly explaining changes in quality service delivery at TRA head Office because p<0.05.

The finding shows that e-training practices at the office added value of quick response to customer using online services hence impact to customer satisfactions and increases number of staff trained as the results increases professionalism in service delivery hence impacts on customer satisfactions with service delivery. Furthermore; the study observed that e-training system at TRA Head Office has coefficient -0.392 and t-value -2.277 at p=0.025. The finding imply that there is e-training system at TRA Head Office is significantly explaining changes in customer satisfactions at TRA head office because p<0.05.

The finding indicates that use of e-communication address operational challenges as the result contribute to operational performance, reduce time taken to respond to work activities that impact of operational performance and lower operational costs in work communication. Furthermore; the study observed that e-communication system at TRA head Office has coefficient 0.407 and t-value 2.230 at p=0.028. The finding imply that there is e-communication system at TRA head Office is significantly explaining changes in time operational performance at TRA head office because p<0.05.

The study recommends that application of human capital management information system has to important priority for an organization since it has observed that it contribute performance Tanzania Revenue Authority at head quarter in Dar es Salaam. The study recommends that policy development should be aligned with application of e-human capital management system that contributes toward improving operational performance of an organization.

The study recommends that further study must be conducted assessing challenges facing adoption of online human capital management system in other organization in Tanzania. Also the study has to be conducted assessing the reason behind failure of other public organization to adopt online human capital management system.

6. References

AL-Gharaibeh, S. M. A. and Malkawi, N. M. M. (2013). The Impact of Management Information Systems on the Performance of Governmental Organizations- Study at Jordanian Ministry of Planning. International Journal of Business and Social Science. 9pp.
AL-Mobaideen, H., Allahawiah, S. and Basioni, E. (2013). Factors Influencing the Successful Adoption of Human Resource Information System: The Content of Aqaba Special Economic Zone Authority. Intelligent Information Management. 9 pp.

Al-Shibly, H. (2011). Human resources information systems success assessment: An integrative model. Australian Journal of Basic and Applied Sciences, 5(5), 157-169.

Armstrong, Michael (2009). A Handbook of Human Resource Management Practice (11th ed). London: Kogan Page.

Bailey, D. K. (1998). Methods of Social Research. Collier Macmillan Publishers, London. 478 pp.

Baraghani, N. S. (2007) Master’s thesis on factors influencing the adoption of internet banking. Lulea University of Technology.

Beadles, N. A., Lowery, C. M., and Johns, K. (2005). The impact of human resource information systems: An exploratory study in the public sector, Communication of the IIMA, 5(4), pp. 39-46.

Beaumaster, S. (2002). Local government IT implementation issues: a challenges for public administration. Paper presented at the 35th Hawaii International Conference on System Sciences, Hawaii, USA.

Becker, B. and Gerhart, B. (1996) —The Impact of Human Resource Management on Organizational Performance: Pro- gress and Prospects, 1 Academy of Management Journal, Vol. 39, No. 4, pp. 779-801

Boateng, A. (2007). —The Role of Human Resource Information Systems (HRIS) in Strategic Human Resource Management (SHRM), 1 Master of Science Theses, Accounting Swedish School of Economics and Business Administration, Palovartijantie.

Cisco S (2008). Big Buckets for Simplifying Records Retention Schedules- An approach for Increasing Retention Compliance. Arma International.

Daft, R. L. (2001). Organization Theory and Design (7 ed.). Cincinnati, OH: South-Western College Publishing.

DeSanctis, G. (1986). Human Resource Information Systems— A Current Assessment, 1 MIS Quarterly, Vol. 10, No. 1, pp. 15-27.

Dessler, G. (2005). Human Resource Management, 10 ed. USA: Prentice Hall.

Enshur, E., Nielson, T., and Grant-Vallone, E. (2002). Tales from the hiring line: Effects of the Internet technology on HR processes. Organizational Dynamics, 31(3), 224-244.

Gargeya, V. B. and Brady, C. (2005). Success and failure factors of adopting SAP in ERP system implementation. Business Process Management Journal, 11 (5), 501–516.
Georgopoulos, B., and Tannenbaum, A. (1957), —A Study of Organizational Effectiveness‖, American Sociological Review 22, pp.534-40

Goddard W., and Melville S. (2006), Research Methodology, An introduction. 2nd edition, Lansdowne.

Government Notice of the United Republic of Tanzania, GN no. 362 of 2012.

Gupta C.B. (2006). Human Resources Management. 7th edition Sultan Chand and Sons, India.

Gürol, Y., Wolff, A., and ErtemsirBerkin, E. (2010). E-HRM in Turkey: A case study. In I. Lee (Ed.), Encyclopaedia of E-Business Development and Management in the Global Economy, pp. 530–540.

Hatry, H. 1980. Performance Measurement Principles and Techniques. Public Productivity Review, 4: 312-339.

Hendrickson, A. R. (2003). Human resource information systems: Backbone technology of Contemporary Human Resources, Journal of Labour Research, 24(3), pp. 381–394.

Hevner, A. R., March, S. T., Park, J. and Ram, S. (2004). Design science in information system research. MIS Quarterly, 28 (1), 75–105.

Holt, D. H. (1987). Management Principles and Practices 3rd edition, Prentice Hall, Englewood Cliffs New Jersey.

Hur, Y. (2007). Organizational Performance, Turnover, and Human Resource Management: Focusing on Municipal Police Services. University of Kentucky Doctoral Dissertations. 238pp.

Hussin B. A. (2011). A thesis on The relationship between job satisfaction and job performance among employees, Tradewinds group of companies. Open University. Malaysia

Isaac A. O. (2011). Integrating Management Information Systems into the Corporate strategy of Cocoa Marketing Company (GH) Ltd. Kwame Nkurumah University of Science and Technology

Jahan, S. (2014) Human Resources Information System (HRIS): A Theoretical Perspective. Journal of Human Resource and Sustainability Studies, 2, 33-39. [http://dx.doi.org/10.4236/jhrss.2014.22004]. Accessed on 7th July, 2015.

Karakanian, M. (2000). Are human resources departments ready for E-HR Information Systems Management, 17(4), pp.1–5.

Kassam, A. (2013). Challenges of Human Capital Management Information System (Lawson Version, 9) in Local Government Authorities: The case of Shinyanga Municipal Council. A Dissertation for Award of MSc Degree at Mzumbe University, Morogoro, Tanzania. 100pp.
Kayunze, K.A. (1998). Comparative contribution of non-farm and farm enterprises to rural poverty alleviation in Mbeya Region, Tanzania: A case study of Ileje and Rungwe Districts. Unpublished M.A Dissertation, Sokoine University of Agriculture, Morogoro, Tanzania, pp. 10-145.

Kearney, R., and Berman, M. (1999). Introduction. In M. Berman (Ed.), Public Sector Performance: Management, Motivation, and Measurement: 1-6. Colorado: Westview Press.

Keim, T., and Weitzel, T. (2009). An adoption and diffusion perspective on HRIS usage. In T. Coronas & M. Oliva (Ed.), Encyclopaedia of Human Resources Information Systems: Challenges in E-HRM (pp. 18-23). Hershey, PA: IGI Global.

Kornkaew, A. (2012). Management Information System Implementation Challenges, Success Key Issues, Effects and Consequences: A Case Study of Fenix System. Master’s Thesis within Military Logistics at Jönköping University, Jönköping International Business School, Jönköping International Business School. 67 pp.

Kovach, A., Hughes, A., Fagan, P. and Maggitti, G. (2002).—Administrative and Strategic Advantages of HRIS, l Employment Relations Today, Vol. 29, No. 2, pp.43-48.

Kroenke, D. M. (2011). Using Management Information System (MIS), third edition, New Jersey: prentice hall.

Kulik, C. T., and Perry, E. L. (2008) When less is more: The effect of devolution on HR’s strategic Role and Donstrued Image, Human Resource Management, 47(3), pp.541–558.

Kumar, A. (2010). Milk marketing chains in Bihar: Implications for dairy farmers and traders: National Centre for Agricultural Economics and Policy Research, New Delhi, India. Agricultural Economics Research Review 23: 469 –477.

Lam, T., Cho, V. and Qu, H. (2007). —A Study of Hotel Employee Behavioural Intentions towards Adoption of Information Technology, lHospitality Management, Vol. 26, No. 1, pp.49-65.

Lederer, L. (1984). —Planning and Developing a Human Resource Information System, l The Personnel Administrator, Vol. 29, No. 8, pp. 27-39.

Lengnick-Hall, M. and Lengnick-Hall, C. (2003). —Human Re-Source Management in the Knowledge Economy, lBerrett-Koehler Publishers, San Francisco.

Lilian, J. (2010). BarrierstoEffectiveRecordsKeepinginProcurement Entities, Mzumbe

Menachemi, N. and T. H. Collum (2011). "Benefits and drawbacks of electronic health record systems." Risk ManagHealthc Policy 4: 47-55.

Musyaffi, A. M., Johari, R. J., Rosnidah, I., Sari, D. A. P., Amal, M. I., Tasyrifania, I., ... & Sutanti, F. D. (2021). Digital Payment During Pandemic: An Extension of The Unified Model of QR Code. Academic Journal of Interdisciplinary Studies, 10(6), 213-213.
Musyaffi, A. M., & Muna, A. (2021). Critical Factors of Cloud Accounting Acceptance and Security for Prospective Accountants: Tam Extension. Jurnal Riset Akuntansi Kontemporer, 13(1), 1-6.

Musyaffi, A. M. (2022). Learning Management System Sustainability for Accounting Student: The Existence of Self-Efficacy. Quality-Access to Success, 23(188).

Rumengan, J., Wibisono, C., & Otok, B. W. (2018). Moderating Partial Least Square To The Management Information System With Total Quality Management Of Study Program Performance. International Journal of Civil Engineering and Technology (IJCIET), 9(9), 344-352.

Sakurai, M., & Murayama, Y. (2019). Information technologies and disaster management–Benefits and issues. Progress in Disaster Science, 2, 100012.

Talón-Ballestero, P., González-Serrano, L., Soguero-Ruiz, C., Muñoz-Romero, S., & Rojo-Álvarez, J. L. (2018). Using big data from customer relationship management information systems to determine the client profile in the hotel sector. Tourism Management, 68, 187-197.

Dou, X. (2020). Big data and smart aviation information management system. Cogent Business & Management, 7(1), 1766736.