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USER CHARACTERISTICS AND EFFECTIVENESS OF HUMAN RESOURCE INFORMATION SYSTEM (HRIS) IN THE TANZANIAN LOCAL GOVERNMENT AUTHORITIES

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ABSTRACT
The Tanzanian Government introduced Human Resource Information System in Local Government Authorities (LGAs) in order to address the challenges of using manual system in handling employees' information. The challenges relate to incomplete, in accurate and outdated civil servants data'. This article examines the influence of user characteristics on HRIS effectiveness in the LGAs in Tanzania in terms of information timeliness, completeness and accuracy. About 37 LGAs in six regions were involved namely; Mwanza, Arusha, Dodoma, Morogoro, Iringa and Kagera. Primary data were collected through questionnaires administered to 201 Human Resource Officers and interviews conducted to eight key informants. Secondary data were mainly collected through documentary review. The study employed the ordered logistic regression model to analyse data. The findings show user characteristics namely; user level of IT skills, commitment and experience have a significant influence on HRIS effectiveness in terms of timeliness, completeness and accuracy of information. The findings imply that frequent training of employees on the relevant IT skills, nurturing commitment of HRIS staff and encouraging experience sharing among them should be considered adequately and sustainably for effective HRIS in the LGAs.

Key words: *Effectiveness, Human Resources Information System, Local Government Authorities and User characteristics*

1.0 INTRODUCTION
Science and technological development in the 21st century has led to tremendous transformations in Human Resource Management by simplifying various functions such as Human Resource recruitment, performance management and payroll management (Wairimu and Karanja, 2016).A century ago, HRM relied on manual operations for employees' record keeping. The manual system was tedious, painstaking, and inefficient. In addition, the system had many challenges including delays in accessing employees' information, systematic errors caused by loads of paperwork, insecurity of personnel information and

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difficulty in enabling employees to access their personal information (Akoyo and Muathe, 2017). In addition, the manual record system required that all information regarding employees be kept the headquarters of multilateral companies or government institutions; this made it difficult for employees in remote places from accessing information when needed at short notice (Simba and Mwangu, 2006).

The advancement in science and technology in Information and Communication Technology (ICT) has enabled innovation and customisation of Human Resource Information System (HRIS) to replace the manual system. The HRIS has two main components namely; HRM including various HR roles and processes and ICT use (Kroenke, 2014). These two components in combination enables the organisation to acquire, store, manipulate, analyse, retrieve and disseminate HR information (Singh, Jindal and Samim, 2011; Jahan, 2014). Scholars (i.e. Ahmer, 2013; Nagendra and Deshpande, 2014) on HRIS have pointed out the importance of the system, including maintenance of employees essential information including, but not limited to, employees' profiles, attendance reports, salary administration, promotion, recruitments, personal histories, leave, retirement and training and their accomplishments.

HRIS started to be in developed countries in the 1950s to 1960s. Later, HRIS spread all over world including in developing countries through various strategies of technological transfer. In Tanzania, HRIS came into use in 2011 to enable Human Resource Officers (HROs) in the public service to maintain complete and accurate employees' information and to make any necessary changes regarding 'updating' employees' data (Opiyo, 2015). The system started in the ministerial departments under the central government and it was later introduced in the Local Government Authorities (LGAs), which are the lowest government level in Tanzania. The Introduction of the HRIS in LGAs went in tandem with the provision of training to HROs with the aim of improving their effectiveness in using the system in order to produce complete, accurate, and up to date civil servants' information. Although the application of HRIS in LGAs has more than ten years, the challenges of manual system including the emergence of ghost workers, the use of fake certificates among civil servants and incomplete records among civil servants persist (Mgonja and Tundui, 2012). In August 2016, the Tanzanian government had 19,700 ghost workers, 9,932 civil servants with fake certificatesand more than 1500 academic credentials were used by multiple employees while 11,500 civil servants had incomplete records (Akwei, 2017; Iaccino, 2017; Muchemwa, 2017). Such findings raise a critical question on the effectiveness of user characteristics with the system. In the current study, user characteristics are measured in terms of IT skills, HR knowledge, education qualification, work experience and employee commitment and HRIS effectiveness in terms of completeness, accuracy and timeliness of information.

Such a critical question is associated to the reality that the system requires competent, experienced and dedicated personnel order to operate effectively, that is, to produce complete, accurate and timely outputs (Oliveira and Martins, 2010). Previous studies on HRIS paid little attention if any on influence of users' characteristics on the effectiveness of the system. Instead, they focused on the importance, impacts, challenges and influence of HRIS on decision-making (e.g. Matimbwa and Masue, 2019; Jorojick, 2015). Several studies (i.e. Aziz *et al.,* 2012; Akoyo and Muathe, 2017) identified user characteristics as a determinant of HRIS effectiveness. However, the extents to which user characteristics (in terms of IT skills, HR knowledge, and commitment, experience, and education qualification) influence HRIS effectiveness in Tanzanian LGAs is hardly known, this is the research gap, which the current study sets to address. Therefore, this paper investigates: 1) the existing relationship between user's characteristics and effectiveness of the HRIS; and 2) the influence of user characteristics on the effectiveness of HRIS in the

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LGAs in Tanzania in terms of information timeliness, completeness, and accuracy. It is hypothesized here that users' characteristics have influence on the effectiveness of the HRIS.

The Integrated Management Competence Model (IMCM) is an explanatory tool that identifies knowledge, skills, abilities, traits and behaviour, which are needed to enable effective performance of tasks are embedded in a particular job (Lucia and Lepsinger, 1999). For the model to be useful, these competencies must comply with job activities of an individual (Lindner, 2001; Vathanophas and Thaingam, 2007). The IMCM is relevant to the current study as it allows the researcher to formulate variables of user' characteristics (skills, knowledge, experience, commitment and education qualification), which influence the adoption and proper implementation of HRIS in LGAs. The objective of HRIS was to improve the maintenance of employees' information for decision-making processes by HROs although it was difficult to attain. Accordingly, IMCM applies to the current study as the model can be employed in identifying the influence of user' characteristics on HRIS effectiveness in the provision of complete, accurate and up-to-date employee information.

The HRIS requires both technical and managerial skills (Akoyo and Muathe, 2017) and its core functions are to effectively integrate ICT with HRM functions (Grant and Vogt, 2015) and to develop reliable and cost-effective uses that support a firm's business needs relatively faster than the competition in the market (Mbugua, 2015). Various authors perceive IT skills and employees' experience as significant components affecting HRIS effectiveness in the provision of complete and accurate output, often referred to as processed data (Oliveira and Martins, 2010). Scholars (i.e. Fernandez, 2001; Combs *et al*., 2006) reveal that employees' technical skills, interpersonal skills, and workplace expertise enhance their rapid familiarisation with the new technological advancements consequently increasing HRIS organisational effectiveness. A study by Nurhayati and Mulyani (2015) reveals that user skills, knowledge and experience influence the quality of Accounting Information System in terms of accuracy and timeliness of information.

In another study Aziz, Salleh and Mustafa (2012) observe that timeliness, completeness, and accuracy of information are influenced by skills level, education, training, professional levels, and user attitude towards technology. Elsewhere, Mahmood and Swanberg (2001) revealed that inadequate training influenced the rate of use of information system negatively. Barus, Putri, and Setiawati (2017) also established that user competence in terms of skills, knowledgeand experience had a positive and significant relationship with the quality of accounting information system management at a significance level of less than 5 percent. They further caution that the relevance of the information system greatly depends on users' expertise in building and maintaining the system. These studies identified user characteristics as a determinant of HRIS effectiveness. However, the extent to which user characteristics influences HRIS effectiveness in Tanzanian LGAs is still unknown. This is the research gap, which the current study attempts to address.

3.0 METHODOLOGY

The study was conducted in six regions of Tanzania Mainland namely; Mwanza, Arusha, Dodoma, Morogoro, Iringa, and Kagera. As reported in Civil Servants' Auditing Report of 2016 (URT, 2016), the sampled regions represent different levels of ghost workers. The selection of regions was preceded by stratification of the regions based on the number of ghost workers reported. Three strata were created namely, high (> 150 ghost workers), moderate (< 150 but > 50 ghost workers), and low (< 50 ghost

workers). The regions in each stratum were first assigned a unique number for identification and in each stratum; two regions were randomly selected for further assessment of the influence of users' characteristics on the effectiveness of HRIS. In each stratum, random two regions were picked randomly using MS excel. According to the Civil Servants' Auditing Report, Mwanza and Arusha had 334 and270 ghost workers respectively (URT-Mwanza, 2016; URT- Arusha, 2016), thus representing five regions with high number of ghost workers. Dodoma Morogoro had 139 and 122 ghost workers respectively (URT-Dodoma, 2016; URT-Morogoro, 2016), thus representing 9 regions with moderate number of ghost workers. Iringa and Kagera had 15 and 14 ghost workersrespectively (URT-Iringa, 2016; URT-Kagera, 2016), thus representing9 regions with few ghost workers. Apart from ghost workers, the audit discovered that, 9,932 civil servants had fake certificates (Materu, 2017; Iaccino, 2017). The audit particularly revealed that, more than 1500 academic credentials were used by multiple employees while 11,500 civil servants had incomplete records (Akwei, 2017; Iaccino, 2017). Among the 9,932 public servants with fake certificates, 8716, which is 87.76 percent were from the LGA in the selected Regions and the remaining 1216, which 12.24 percent were from the central government (Iaccino, 2017).

The study employed explanatory cross sectional design of a mixed method because the study was aimed at explaining the causal effect relationship between user characteristics and HRIS Effectiveness. The fieldwork involved two sequential distinct phases of data collection. The first phase started with the collection of quantitative data and the analysis of the numerical data relevant to the research questions. The second phase involved the collection of qualitative data. Quantitative data were collected through a structured questionnaires administered to Human Resource Officers (HROs). HROs were chosen because they are well informed and had valuable knowledge on the application and effectiveness of the HRIS in LGAs as they consistently use HRIS in their day to day. Accordingly, the sampling frame for the study comprised all 249 HROs in the selected regions. The sample size was 213 HROs, which was obtained using Robert and Morgan's (1970) formula. The researcher managed to get 201 out of 213 respondents, which is sufficient sample for the current study (see Elamir andSadeq, 2010; Mohammadi *et al.*,2015; Basbas *et al.*, 2013).

In each region, all district councils (i.e. Local Government Authorities – LGAs) were selected for data collection for the study. Proportional sampling was used to obtain the number of HROs for questionnaire survey per district council, (Equation 1). In each district, HROs were picked randomly using in MS excel for questionnaire survey. The respondents responses were recorded on the questionnaires against the question asked. The researcher was helped by two research assistants in order to hasten and facilitate data collection process. The research assistants were recruited based on their familiarity with ICT and HR practices not only to simplify the training process but also to ensure accurate data collection. The training focused on HR practices, enumerators' roles, questionnaire administration, data recording, data collection methods and adherence to research codes of conduct and ethics.

$$S_d = \left(\frac{HRO_d}{HRO_T}\right) \times G_s \quad \ldots\ldots 1$$

Where:

S_d = sample per district (i.e. number HROs sampled per district/LGAs), HRO_d = number of HROs available in the district that used to prepare sampling frame, HRO_T = total number of HROs in all

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sampled regions (i.e. all LGAs in sampled regions)= 249 HROs and G_s = General sample size obtained using a developed by Robert and Morgan, (1970) = 213 HROs

Qualitative data were collected through in-depth interviews with key informants selected based on their HRIS knowledge. These included HROs (approvers) and Directors of Human Capital Division. Six (6) HROs "approvers" and two (2) Directors of Human Capital Division were interviewed. Secondary data were collected through reviewing and analysing various relevant documents such as ICT policies, HRIS reports on diverse issues such as recruitment and promotion procedures, ghost workers, and counterfeit certificate reports were accessed from government authorities. The respondents' preliminary information was analysed using descriptive statistics; frequency and cross tabulation. To examine the influence of user characteristics on HRIS effectiveness, the study employed the ordered logistic regression model. User characteristics comprise: IT skills, HR knowledge, education qualification, work experience and employees' commitment. In building the model, user characteristics were treated as predictor variables whereby effectiveness in terms of timeliness, completeness and accuracy were the dependent variables; one model for every dependent variable. Equation 2 presents the model specifications:

$$\text{Prob}(Y) = \beta_0 + \beta_{ij} X_{ij} + \ldots\ldots + \beta_n X_n + E \quad \ldots\ldots 2$$

Where:

Y = HRIS effectiveness in LGAs (ordered to be measured by Five Point Likert Scale of timeliness of information, Completeness of information and Accuracy of information).

β0 = Constant term

βij– βnj = Explanatory indicators (coefficient estimates) of predictor 'i' to 'n' in setting j

Xij – Xij= Predictor 'i' to 'n' of Y in setting j in this study, predictors are user characteristics,

ε = Normally Distributed Error Term

The dependent variable were categorically measured through a five point Likert scale and the responses were ranked as 1= Strongly Disagree; 2= Disagree; 3= Neither Agree nor Disagree; 4= Agree; 5= Strongly Agree. User characteristics were recorded as either numerical (discrete and continuous) or categorical variables. The modelling procedure started with checking multicollinearity of user characteristics. Multicollinearity exists whenever an independent variable is highly correlated with one or more independent variables. For this case a cut point was r = 0.9 and above (Pallant, 2005). The results of correlation matrix (which is not presented here due to space limitations) show that, the maximum r =0.401, thus no variable was excluded, in other words, all variables were included in the modelling procedure. Qualitative data were subjected to content analysis. Content analysis helps to reduce the volume of recorded information or communication to a set of categories that represent some characteristics of the research. The content analysis was done to produce information that can be used to explain the situation in the field regarding HRIS effectiveness in improving employees' information in the selected LGAs.

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3.0 FINDINGS AND DISCUSSIONS

3.1Distribution of Users' Characteristics

3.1.1 General distribution of users' characteristics

Table 1 presents the distribution of user characteristics in the sampled LGAs. Overall, the findings show that 44percent of the interviewed HROs had inadequate IT skills while 52percent were highly knowledgeable about human resource management. This study suggests that poor record management is attributed to limited ICT skills among human resource officers. The findings imply that it is important for LGAs to invest in human capital to achieve effectiveness, productivity and efficiency. This observation is consistent with the findings in other HRIS scholars such as Kassam (2013) who recommends for a sustainable improvement availability and accessibility of facilities of ICT skills among HRIS users to enhance the use of HRIS in performing HR functions. In addition, HR knowledge was found to be high among HROs, which perhaps explains the existence of fewer irregularities in regions with low challenges of HRIS.

The findings show further that the majority (72%) of HROs interviewed indicated to be committed to the employer (organisation). Regarding work experience 56 percent indicated to have working experience of between 4 to 7 years. According to the findings, work experience increases effectiveness of HRIS use, means, those with sufficient experience may perform better than the case with inexperienced counterparts. A study by Brennan, Blasko, Little, and Woodley (2002) found that work experience has a positive influence on employment outcomes for graduates in the UK.

As for education levels of HROs the findings in Table 1 show that, majority (over 80percent)had bachelor degrees. These findings imply that HROs have sufficient education to help them produce quality information as competent system users as supported by Loch *et al* (2003) and Chitmum and Ussahawanitchakit (2011).

Therefore, education is an important variable because a knowledgeable college graduate is more likely to adopt innovations compared to less knowledge users. Similar observation is made by Olatokun and Adebayo's (2009) that the level of education has the strongest influence on the use of HRIS, as most users are mainly educated. In another study, Yi (2008) asserts that, those with higher education levels are more likely to use ICT because they have more skills and opportunity for going online.

4.1.2 Distribution of user characteristics across regions with high, moderate and low levels of HRIS challenges

Table 2 presents the distribution of users' characteristics, which varied across regions with high, moderate, and low levels of HRIS challenges. From Table 2, the findings in show that HROs who had sufficient information technology skills, human resource knowledge, and committed to the organisation were found in regions with low level of HRIS challenges (i.e. in low category).The difference in responses across three categories using Chi-square test were statistically significant with χ^2 =27.125 at p = <.001 for ICT skills, χ^2 =40.531 at p = <.001 for HR knowledge χ^2 =23.310 at p =<.001 for commitment to the organisation. These findings suggest that poor record management previously recorded in Mwanza and Arusha regions was attributed to limited ICT skills among employees. Thus, HROs with adequate ICT skills are expected to be more competent in using the system than is the case with their counterparts. These findings are consistent with the findings of Hertati and Zarkasyi (2015) who assert that a

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combination of user's knowledge, expertise and commitment culminated to quality information in terms of preciseness and completeness.

Table1: Distribution of User Characteristics

Users' Characteristics	Responses	Percent (%)
Level of information technology skills	Low level	44
	Neither high nor low	35
	High level	21
Level of Human Resource knowledge	Low level	8
	Neither high nor low	40
	High level	52
Level of Commitment to the Organization	Low level	0.5
	Neither high nor low	28
	High level	72
Years of experience in the current position	Less than three years	24
	4-7 years	56
	8-11 years	14
	12-15 years	5
	Above 15 years	0.5
Level of Education	Diploma/Certificate	4
	Bachelor degree	81
	Masters	15

Regarding work experience, the findings were almost equally distributed across the three categories. However, regions categorised as medium and low had a relatively higher number of HROs with 8–11 years of work experience compared to regions categorised as high (Table 2). The education level of HROs across the three categories show that regions with higher challenges had many HROs who had bachelor and master degrees compared to regions with medium and low levels of HRIS challenges. However, the difference across the three categories was statistically not significant with χ^2 =3.453 at p = 0.485 (Table 2). These findings suggest that academic certificate alone is insufficient in ensuring that employees are competent system users. This is attributed to the fact that HROs lack college training in the system's application. Thus, curriculum review could effectively address this anomaly. The findings on education contradict the Integrated Management Competence Model imply that, for a person to produce the required results he/ she must be highly educated.

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Table 2: User characteristics and levels of HRIS challenges

Attributes	Measurement	Level of HRIS challenges			Total	Chi-square	p-value
		High	Medium	Low			
Level of information technology skills	Low level	44(59.5%)	30(43.5%)	15(25.9%)	89(44.3%)	27.125	<.001
	Neither high nor low	21(28.4%)	30(43.5%)	19 (32.8%)	70(34.8%)		
	High level	9(12.2%)	9(13.0%)	24(41.4%)	42(20.9%		
Level of Human Resource knowledge	Low level	9(12.2%)	5(7.2%)	2(3.4%)	16(8.0%)	40.531	<.001
	Neither high nor low	41(55.4%)	33(47.8%)	6(10.3%)	80(39.8%)		
	High level	24(32.4%)	31(44.9%)	50(86.2%)	105(52.2%)		
Level of commitment to the organisation	Low level	1(1.4%)	0(0.0%)	0(0.0%)	1(.5%)	23.310	<.001
	Neither high nor low	29(39.2%)	24(34.8%)	3(5.2%)	56(27.9%)		
	High level	44(59.5%)	45(65.2%)	55(94.8%)	144(71.6%)		
Years of experience in the current position	Less than three years	24(32.4%)	14(20.3%)	11(19.0%)	49(24.4%)	13.694	.090
	4-7 years	42(56.8%)	38(55.1%)	33(56.9%)	113(56.2%)		
	8-11 years	7(9.5%)	10(14.5%)	11(19.0%)	28(13.9%)		
	12-15 years	1(1.4%)	7(10.1%)	2(3.4%)	10(5.0%		
	Above 15 years	0(0.0%)	0(0.0%)	1(1.7%)	1(.5%)		
Level of education	Diploma/Certificate	3(4.1%)	4(5.8%)	1(1.7%)	8(4.0%)	3.453	.485
	Bachelor degree	60(81.1%)	52(75.4%)	51(87.9%)	163(81.1%		
	Master degree	11(14.9%)	13(18.8%)	6(10.3%)	30(14.9%)		
Total		**74**	**69**	**58**	**201**		

Source: Field Data (2019)

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4.1.3 Influence of Users' characteristics on HRIS effectiveness

Based on the model fitting information, data entered adequately fitted the models and at least one of the predicators is significantly related to the response variable. The findings of Goodness-of-Fit show that out of the three models, timeliness does not fit very well (p =.004). The remaining variables namely; completeness, and accuracy have large p- value suggesting that, the model fits very well the data. The findings of Pseudo R-square Statistics (the pseudo R^2 values) (i.e. Nagelkerke for timeliness = 0.251, for completeness = 10.3% and accuracy = 10.3) suggest that a model containing user characteristics is a poor predictor of the outcome. The findings in Table 3 present parameter estimates that provide information on the influence of predictor variables. The table indicates the Wald statistic test, which is commonly used to test the null hypothesis, shows that, users' characteristics have some influence on HRIS effectiveness. For all three models, the Wald statistics are non-zero, which implies that, user characteristics have some influence on the effectiveness of HRIS (i.e. Timeliness, Completeness, and Accuracy), and therefore null hypothesis is rejected in favour of the alternative hypothesis.

The findings in Table 3 present the regression coefficients (β values). Out of the five user characteristics, at least one for each dependent variable had negative β-values implying that they influence the effectiveness of HRIS negatively while four of the five characteristics for each dependent variable had positive influence. Furthermore, the findings show that, user characteristics statistically influence HRIS effectiveness. For timeliness, only two user characteristics, namely, IT skills (β = 0.452, p = 0.002) and employee commitment (β = 0.889, p = <.0.01) had statistically significant influence on HRIS effectiveness. For completeness, employees' commitment (β = 0.464, p = 0.031) and work experience (β = 0.46, p = 0.006) had statistically significant influence. For accuracy, only one individual characteristics; IT skills (β = .329, p = 0.023) had statistically significant influence (Table 3).

User characteristics with higher influence on the effectiveness of the HRIS based on magnitude of β coefficients for timeliness are Commitment (0.889), IT skills (0.452), HR knowledge (0.32), and work experience (0.234). Education level (-0.098) is the only variable with negative influence on the HRIS effectiveness based on timeliness. For completeness of information generated by the system, most influential user characteristics are commitment (0.464), experience (0.46), IT skill (0.231), and education level (0.159) while HR knowledge had negative influence (-0.027). IT skills (0.329), work experience (0.274), commitment (0.033) were the most influential variables while HR knowledge (-0.052) and education level (-0.162) have negative influence of which education level has the highest negative influence. Study findings suggest that generation of information quality from a system supersedes education qualification a user posses; this is attributed to trustworthiness and honest. The Director of Human Capital Division (DHCD) had this to say,

> *There are many challenges facing HROs in LGAs but among them is the failure to adhere to procedures and regulations. Some officers are generally dishonest and in a number of ways tend to bend various rules for their own benefit or for the benefit of other members in their departments (Director Human Capital Division).*

On honesty, another officer responding on the weakness of HROs in LGAs has this to say,

> *Some officers are dishonest and are not committed to their jobs. Also, confidentiality surrounding workers' information is a great challenge although steps like employment contract terminations and legal suits are usually taken against breach of confidentiality (HRO from the Ministry of Public Service Management and Good Governance).*

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One HRO in Morogoro Municipal observed,

> *There was time the District Education Officer labelled me as lazy and uncommitted owing to delays in effecting new employees' salaries. During 2014 teachers' employment, I delayed newly employed teachers' salaries whose employment particulars were already loaded in the system. When I made a follow up with the Public Service Commission in Dar es Salaam, I was told that the delay was due to approval delays because the person responsible had been assigned an acting role in another position in the Commission. The DEOs and affected teachers however did not seem to understand the situation upon my return from Dar es Salaam (HRO Morogoro Municipal).*

The importance of IT skills, commitment, and experience in influencing effectiveness of HRIS was also reported by other scholars. Regarding IT skills, Njau (2017) reports that only 43.3percent is used due to lack of IT expertise, which hinders system usage in Mwanza Municipality. Thus, IT skill is a pre-requisite for the effective use of the system in any organisation, including LGAs. This observation is consistent with the findings from a HRO from UTUMISHI while responding on the challenges approvers face in dealing with HROs in LGAs, had this to say,"……*One of the challenges that baffle me is the rate of computer illiteracy among human resources officers to the extent that some of them cannot even attach documents in PDF format. Similarly, other officers are not updated on policies or systems and it is not uncommon to find a number of them using outdated systems….."*

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Table 3: Parameter estimates for user characteristics

Timeliness			Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
								Lower Bound	Upper Bound
	Threshold	[TIMELINESS = 1.00]	0.074	1.87	0.002	1	0.968	-3.59	3.739
		[TIMELINESS = 2.00]	3.535	1.6	4.88	1	0.027	0.399	6.67
		[TIMELINESS = 3.00]	6.237	1.644	14.393	1	<.001	3.015	9.459
		[TIMELINESS = 4.00]	8.837	1.706	26.839	1	<.001	5.494	12.18
	Location	q5.1_IT skill	0.452	0.145	9.705	1	0.002	0.167	0.736
		q5.2_HR knowledge	0.32	0.206	2.414	1	0.120	-0.084	0.724
		q5.3_commitment	0.889	0.234	14.43	1	<.001	0.43	1.348
		q5.4_experience	0.234	0.175	1.801	1	0.180	-0.108	0.577
		q5.5_education level	-0.098	0.338	0.084	1	0.772	-0.761	0.565
Completeness	Threshold	[COMPLETENESS = 1.00]	0.41	1.532	0.072	1	0.789	-2.593	3.413
		[COMPLETENESS = 2.00]	3.373	1.513	4.973	1	0.026	0.409	6.338
		[COMPLETENESS = 3.00]	4.486	1.527	8.625	1	0.003	1.492	7.479
		[COMPLETENESS = 4.00]	6.431	1.561	16.973	1	<.001	3.371	9.49
	Location	q5.1_IT skill	0.231	0.135	2.934	1	0.087	-0.033	0.494
		q5.2_HR knowledge	-0.027	0.194	0.02	1	0.888	-0.407	0.353
		q5.3_commitment	0.464	0.215	4.673	1	0.031	0.043	0.885
		q5.4_experience	0.46	0.168	7.488	1	0.006	0.131	0.789
		q5.5_education level	0.159	0.32	0.246	1	0.620	-0.469	0.786
Accuracy	Threshold	[ACCURACY = 1.00]	-4.667	1.869	6.234	1	.013	-8.331	-1.003
		[ACCURACY = 2.00]	-.593	1.589	.139	1	.709	-3.708	2.523
		[ACCURACY = 3.00]	2.041	1.597	1.633	1	.201	-1.090	5.172
		[ACCURACY = 4.00]	4.678	1.668	7.862	1	.005	1.408	7.947
	Location	q5.1_IT skill	.329	.144	5.183	1	.023	.046	.612
		q5.2_HR knowledge	-.052	.206	.065	1	.799	-.456	.351
		q5.3_commitment	.033	.226	.021	1	.884	-.409	.475
		q5.4_experience	.274	.176	2.417	1	.120	-.072	.620
		q5.5_education level	-.162	.340	.227	1	.634	-.829	.505

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These findings are consistent with the findings of other previous studies on HRIS. Accordingly, Loch, Straub and Kamel (2003) reported that personnel with high skills and experience in similar technology are likely to derive more usefulness and up-to-date information. Similarly, Zote and Tole (2014) consider user characteristics as one of the three major determinants of information quality. According to these scholars, information quality can be better achieved if users within organisations have proper knowledge and skills on the system. Chitmun and Ussahawanitchakit (2011) show the importance of user commitment in obtaining timely information. In addition, Gelinas and Dull (2012) and Simba and Mwanga (2006) revealed that the quality of information resulting from the information system depends on the qualities of users in terms of their skills and knowledge.

As for commitment (which is referring to the state or quality of being dedicated to a cause, activity), the findings reveal that committed employees are more effective as opposed to non committed ones. Commitment is identified under the 'commitment-trust' theory of relationship marketing (Morgan and Hunt 1994), which holds that relational exchanges between a firm and its various stakeholders leads directly to co-operative behaviours that are vital for long term mutually beneficial relationships. Allen and Meyer (1991) identified three components of commitment: 'continuance, 'normative' and 'affective' commitment. Although the study did not assess which type of commitment influenced the effectiveness of HRIS in LGAs in Tanzania, it is essential for employers to create affective employee commitment. This can be achieved through recruiting qualified people, treating employees fairly and maintaining trust, increasing payments and rewards (i.e. salaries and bonus), encouraging work-life balance, maintaining promotionsand building good relationships among colleagues and managers (Robinson, 2003).

HRO from UTUMISHI showed how lack of commitment among employees affects the effectiveness of HRIS. In responding to the question asked on challenges approvers face when dealing with HRO in LGAs, the HRO said: Ignorance of the relevant system to follow also findings into unproductiveness on part of the officer since they eventually lack commitment to a given task.

4.0 CONCLUSION

In conclusion, five variables that were regressed against effectiveness had positive correlation coefficients. This means that most user characteristics with positive coefficients increase effectiveness of the HRIS in terms of timeliness, completeness and accuracy. Three user characteristics with statistically significant influence on effectiveness of the HRIS include IT skills, commitment and experience. The study concludes that adequate knowledge on the system (IT skills), willingness and dedication of the employees to work (commitment) and the overall time within which employees use the system (experience) are the three important factors for HRIS effectiveness. Of the three variables, IT skills are acquired through training. Therefore, employers should invest in training employees on HRIS usage to boost effective use of the system.

Furthermore, user characteristics differ in terms of the level of influence on HRIS effectiveness based on the magnitude of β coefficients. For achieving timely and complete outputs, commitment have higher influence than is the cases with other to variables while the education level and HR knowledge appears to decrease effectiveness on timeliness and completeness of information, respectively. IT skills are the most influential variable in achieving accurate outputs (accuracy), while HR knowledge appears to the highest negative influence.

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5.0 RECOMMENDATIONS

Based on the findings and the conclusions drawn, the following recommendations are made: first, there is a need for LGAs to ensure sustainable training of HRIS staff on IT and HR skills for enhancing their competencies. The second recommendation is that LGAs need to enhance commitment of HRIS staff through recruitment of relevant personnel, enhance employees' trust through promoting the culture of fairness, transparencyand participation. Third, experience sharing and HRIS use are highly correlated. This calls for the promotion of experience sharing among employees in the LGAs to enhance HRIS use.

REFERENCES

Ahmer, Z. (2013). Adoption of Human Resource Information Systems Innovation in Pakistani Organizations. *Journal of Quality and Technology Management, Volume II, Pp 25–50.*

Akoyo, S.I. and Muathe S.M.A. (2017). Towards a Theoretical Model for Human Resource Management Information Systems, Government Policy and Organizational Performance: A Research Agenda. *IOSR Journal of Business and Management (IOSR-JBM). Volume 19, Issue 1. pp 43-53*

Akwei, I. (2017). Thousands of Tanzanian Civil Servants Sacked Over Fake Certificates. Africanews, April 28th, 2017. Retrieved on May 11th 2017 from http://www. africanews.com

Allen N.J and Meyer J.P(1991). A Three-Component Conceptualization of Organizational Commitment. Human Resources Management Review, 1, 61-89

Aziz N.M, Salleh H, and Mustafa N.K. (2012), People Critical Success Factors (CSFs) in Information Technology/Information System (IT/IS) Implementation. *Journal of Design and Built, 5(1), 1-17*

Barus I.S.L, Putri R.K and Setiawati R (2017). Influence of User Competence Towards the Quality of Information Management Accounting Information System in University Widyatama. *Journal of Engineering and Applied Science* 12(2)-319-328

Basbas S, Tetou V and Politis I. (2013). Ordinal and Binary Logistics Models for Examination of Behavioral, Infrastructure and Perception Factors Influencing Biking. Conference paper.

Brennan, J., Blasko, Z., Little, B., &Woodley, A. (2002). UK Graduates and the Impact of Work Experience. London: HEFCE.

Chitmun, S. and Ussahawanitchakit, P. (2011).Management Accounting Decision Making Systems Sophistication and Performance. *Journal of Academy of Business and Economics Volume 11 Number 3.*

Combs, J., Liu, Y., Hall, A. &Ketchen, D. (2006), "How much do high-performance workpractices matter? A meta-analysis of their effects on organizational performance", Personnel Psychology, Vol. 59, pp. 501-28.

Draganidis, F. and Mentzas, G.(2006). Competency based management and of Systems and Approaches. Information Management &Computer Security computer security. 14(1), PP. 51-52.

Elamir E and Sadeq H. (2010).Ordinal Regression to Analyze Employees Attitude towards the Application of Total Quality Management. *Journal of Applied Quantitative Methods, Vol 5 no 4.*

Fernandez, R.M. (2001), "Skill-based technological change and wage inequality: evidence from a plant re-tooling", *The American Journal of Sociology, Vol. 107, pp. 273-320.*

Gelinas, U. J., and Dull, R. B. (2008). Accounting Information Systems, 7th Edition. Thomson South Western.

Grant, R. and Vogt, E.M. (2015). Human Resources Management: Self-Efficacy as a Determinant of Information Technology Effectiveness. *International Journal of Management and Organizational Studies*, Volume 4, Issue 4

Journal Of Co-operative and Business Studies (JCBS)
Vol. 6, Issue 1, April 2021 ISSN: (Online) 2714-2043, (Print) 0856-9037
Full Issue and Text is Available at: http//www.mocu.ac.tz

Hertati L and Zarkasyi W (2015). Effects of Competence User Information System, the Quality of Accounting Information System Management and Implication In satisfaction User Competence (State Owner in Sumatera Selatan). *European Journal of Auditing and Finance Research* Vol 3. No.2 pp 35-60.

Iaccino, L. (2017. Tanzania Fires 10 000 Civil Servants Over Fake Qualifications. Newsweek, April 28th, 2017. Retrieved on May 11th 2017 from http://www.newsweek.com

Jahan, S. (2014). Human Resources Information System (HRIS): A Theoretical Perspective. *Journal of Human Resource and Sustainability Studies*, **2**, 33-39.

Jorojick D.P. (2015). *The Influence of Human Resource Information System on Decision Making in LGAs: The Case of Lawson Version 9 in Kiteto District, Tanzania*. A Dissertation Submitted in Partial/Fulfilment of the Requirements for Award of the Degree of Master of Science in Human Resource Management (MSc HRM) of Mzumbe University

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.

Kroenke, D. M. (2014). *MIS Essentials* (4th ed.). Upper Saddle River, NJ: Pearson.

Lema, L.E. (2013). The Impact of Human Resources Information System in the Performance of Banking Industry: The Case Study of National Microfinance Bank Tanzania Ltd. Dissertation Submitted in Partial Fulfillment of Requirements for the Award of the Degree of Masters of Science in Human Resources Management of Mzumbe University.

Lindner, J.R. (2001).Competency assessment and human resource management performance of county extension chairs. *Journal of southern agricultural education research.* 51(1): 335.

Loch, K. D., Straub, D. W., & Kamel, S. (2003). Diffusing the internet in the Arab world: The role of social norms and technological culturation. IEEE Transactions on Engineering Management, 50(1), 45-63.

Lucia, T.H. and Lepsinger, S. (1999).Communicating the Utility of Human Resource Activities: A Survey of I/O and HR Professionals, *Journal of Business and Psychology*, Vol. 8, pp. 524-36.

Lustri, D., Miura, I. & Takahashi, S. (2007). Knowledge management model: practical application for competency development. *The learning organization*. 14(2), P. 186.

Mahmood, M.A., and Swanberg, D.L. (2001). Factors Affecting Information Technology Usage: A Meta-Analysis of Empirical Literature. *Journal of Organizational Computing and Electronic Commerce*, 11(2), 107-130

Materu, B. (2017). Tanzania Fake Workers Ordered to Leave by May 15. The East African, April 29th, 2017. Retrieved on May 11th 2017 from http://www.the eastafrican.co.ke

Matimbwa H and Masue O S. (2019). Usage and Challenges of Human Resources Information System in Tanzanian Public Organizations. *Journal of Human Resource Management Vol 7, No 4, pp 131-137.*

Mbugua, C. N. (2015). The Role of Human Resource Information Systems in Organizational Effectiveness: A Case Study of Kenya Commercial Bank. *International Journal of Business and Commerce.* Vol. 4, No.06, pp 99-145

Mgonja, B. E. and Tundui, C. (2012). "Institutional Impacts of the Local Government Reform Program on Good Local Governance in Tanzania." *International Journal of Academic Research in Business and Social Sciences 2(5): 206.*

Mohammad, H., Torabi, S., and Dogani A. (2015) Application of Ordered Logit Model in Investigating the Factors Affecting Peoples Income A case of Tehran City. *International Journal of Academic Research in Economics and Management Sciences Vol. 5, No. 3.*

Journal Of Co-operative and Business Studies (JCBS)
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Full Issue and Text is Available at: http//www.mocu.ac.tz

Morgan, R. M and Hunt,S. D. (1994), "The Commitment-Trust Theory of Relationship Marketing", Journal of Marketing, 58 (July), 20 –38.

Muchemwa, S. (2017). Tanzania's Public Ghost Workers Increase. Herald, February 9th, 2107. Retrieved on May 11th 2017 from http://www. herald.co.zw

Nagendra, A. and Deshpande, M. (2014). Human Resource Information Systems (HRIS) in HR planning and development in mid to large sized organizations. Procedia - Social and Behavioral Sciences 133, pp61 – 67.

Njau, S. (2017).Challenges in the Use of Human Capital management Information System (HCMIS) in Local Government Authorities. A Dissertation for Award of MSc Degree at Mzumbe University, Morogoro, Tanzania.

Nurhayati N, Mulyani S. (2015). User Participation on System Development, User Competence and Top Management Commitment and Their effect on The Success of The Implementation of Accounting Information System (Empirical Study in Islamic Bank in Bandung), *European Journal of Business and Innovation Research, Vol. 3e Issue No. 2 2015, 55-68*

Olatokun W.M and Adebayo O.C (2009). Information and Communication Technology by Reproductive Health Workers in Nigeria: A state of the ART, Issues and Challenges. *An Interdisciplinary Journal of Humans in ICT Environment Vol 5(2) 181-207*

Oliveira, T., & Martins, M. F. (2010). Understanding e-business adoption across industries in European countries. Industrial Management & Data Systems, *110*(9), 1337-1354.

Opiyo, A. P. (2015). Effects of Human Resource Information System on Performance of Commercial Banks in Kenya: A Case of Kenya Commercial Bank. *Journal of Business Management* Vol 1 Issue 1 June 2015 Paper 2.

Pallant, J. (2005). SPSS Survival Manual: A step by step guide to data analysis using SPSS for Windows (Version 12). Crow's Nest, NSW: Allen & Unwin.

Robinson, D. (2003). Defining and Creating Employee Commitment: A Review of Current Research. HR Network Paper MP21. Institute for Employment Studies.

Simba D.O and Mwangu M.A. (2006).Factors influencing quality of Health Management Information System Data.A case of Kinondoni District Council in Dar es Salaam, Tanzania. *East African Journal of Public Health* Volume 3 issue 1.

Singh, H.P, Jindal, S. and Samim, S.A. (2011).Role of Human Resource Information System in Banking Industry of Developing Countries. Paper presented in The First International Conference on Interdisciplinary Research and Development, 31 May - 1 June 2011, Thailand.

Swash, G.D. (1997). The information audit. *Journal of Managerial Psychology, 12(5), 312-318.*

Vathanophas, V. & Thaingam, J. (2007). Competence requirements for effective job performance in the Thai public sector. *Contemporary management research*. 3(1). March.

Wairimu, C. and Karanja, P. (2016). Influence of Human Resource Information Systems on Performance of the Banking Industry in Kenya. *The Strategic Journal of Business and Change Management*, 3(4), pp 107-127.

Wickramasinghe, V. & De Zoyza, N. (2009). A comparative analysis of managerial competence needs across areas of functional specialization. *Journal of management development*. 28(4), PP: 345- 347.

Zote E and Tole D (2014). The main factors that influence Data Quality in Accounting Information System. *International Journal of Science, Innovation and New Technology, Vol 1 issue 1*