



THE INFLUENCE OF SYSTEM USERS' COMPETENCIES ON THE PERFORMANCE OF HUMAN CAPITAL MANAGEMENT INFORMATION SYSTEMS IN TANZANIAN

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ABSTRACT

Purpose: Human Capital Management Information System (HCMIS) performance in Tanzanian Local Government Authorities (LGAs) is investigated in this study, with a focus on the effect of user competency.

Design/Methodology/Approach: This study used an explanatory cross-sectional methodology. Mwanza, Arusha, Dodoma, Morogoro, Iringa, and Kagera were the six regions of Tanzania that were included in the study, which included 37 LGAs. A total of 201 Human Resource Officers (HROs) were randomly chosen from each of the sampled districts to fill out a questionnaire that provided the bulk of the study's data. Six (6) HRO "approvers" and two (2) directors from the Human Capital Division were among the eight (8) key informants who were in-depth interviewed. Ordered logistic regression and content analysis were used to analyse the data.

Findings: The study found that 21% of the HROs had sufficient IT skills, 52% claimed to have a deep understanding of HR, and 56% had 4–7 years of experience. System users' abilities, including their degree of IT skills, commitment, and experience, significantly affect HCMIS performance in terms of completeness, accuracy, and timeliness of information, according to the results of the ordered logistic model.

Practical Implications: The study underscores the need for comprehensive and ongoing training programs to improve user competency. By regularly updating the knowledge and skills of employees, LGAs can ensure more efficient and effective use of the HCMIS.

Social Implications: Individuals can be empowered to take charge of their professional development, leading to increased job satisfaction, employee motivation, improved HCMIS competencies, and, in turn, fostering diversity and inclusion.

Originality and Value: The paper identified, cognitive abilities, and behavioural competencies, tailored to the needs and realities of Tanzanian organisations. This holistic approach to assessing competencies is relatively novel and adds depth to understanding how different aspects of user capabilities contribute to system performance.

Keywords: *Competencies. human capital. information system. local government. management.*



INTRODUCTION

The field of Human Resource Management has undergone a revolution in the twenty-first century due to advancements in science and technology. This has resulted in significant changes in staff selection and recruitment processes, the way managers carry out their responsibilities to ensure organisational efficiency, and payroll management (Wairimu & Karanja, 2016). The integration of science and technology into HRM operations aligns with Sustainable Development Goal (SDG) number eight, which focuses on the development of sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. The move is intended to influence staff capabilities and performance. Employees are allocated diverse tasks rather than being confined to predetermined, fixed roles. Instead of specific duties or responsibilities, commitments, goals, or objectives are delineated and then delegated to either teams or individuals, thereby bolstering job security and providing prospects for long-term employment. This approach is complemented by a considerable degree of internal organisational flexibility, production methods based on teamwork, and the incorporation of job rotation. Elevated expectations regarding employees' adaptability, commitment, and performance are associated with relatively heightened levels of employee engagement.

The recruitment process for high-commitment employment systems relies on thorough assessment procedures that take into account a candidate's potential, adaptability, flexibility, and agility. The objective is to identify adaptable individuals who align with the rapidly evolving culture and are willing and capable of exerting the necessary effort to accomplish organisational objectives (Lopez-Cabrales, 2020; Worley & Lawler, 2010). However, Koster & Wittek (2016) found that organisations face intense competition due to globalisation. Another challenge is the rapid advancement in technology, necessitating substantial investments by organisations in new technologically assisted Human Resource Management (HRM) innovations to maintain a competitive edge. As a strategic move to enhance preparedness for anticipated uncertainties, boost performance, and ensure sustainability, organisations are presently dedicating resources to the development of their workforce. It is essential to examine the substantial evidence of global knowledge expansion observed in the past decade. This expansion is not solely attributed to technological progress but is also a result of increasing endeavours to enhance organisational human resources.

Information and communication technology (ICT) has been the focus of recent changes in Human Capital Management Information Systems (HCMIS) can be attributed to advancements in science and technology. This innovative shift has been strategically designed to replace manual systems. The HCMIS is composed of two integral components: HRM, which empowers Human Resources professionals to carry out tasks like managing an employee database, and ICT (Kroenke, 2018). These two components of HCMIS need to be seamlessly integrated to enhance communication, facilitate data retrieval, manage data archives, and facilitate the analysis and modification of human resource information. Improvements in internal communication, data accessibility, storage efficiency, and support for analysis and modification of HR information can only be achieved through the integration of these two HCMIS components (Singh, Jindal, & Samim, 2011; Jahan, 2018). The function of HCMIS in OIM has been investigated by several researchers, such as Ahmer (2015) and Nagendra & Deshpande (2018). According to their research, the system



manages employee data well, which includes keeping accurate profiles, tracking attendance, and enabling successful promotion procedures, among other things.

The inception of Human Capital Management Information Systems (HCMIS) can be traced back to affluent nations in the 1950s and 1960s, and subsequently, it gained global adoption, particularly in underdeveloped countries. In Tanzania, the adoption of HCMIS in 2011 was motivated by the objective of assisting Human Resource Officers (HROs) in the public sector in maintaining comprehensive and accurate employee information. Additionally, the system was introduced to streamline the process of updating personnel information (Opiyo, 2015). The initial implementation of the system took place in all ministerial departments in Tanzania, followed by Local Government Authorities (LGAs). After its introduction, extensive training for Human Resource Officers in HCMIS operation was conducted to ensure that the staff possessed the necessary expertise to generate high-quality information about public servants through the system. More than a decade after the introduction of HCMIS, the same shortcomings that the system aimed to address in the manual system persist. One significant issue contributing to financial losses in the country is the existence of ghost workers on the payroll. Even after the implementation of HCMIS, salaries continue to be disbursed to individuals who are deceased or no longer employed by the government for various reasons (Mgonja & Tundui, 2022). An estimated 19,700 people were working as ghost workers for the government in 2016. There were also reports that 9,932 government employees had fake degrees, 1,500 people applied for jobs or worked for the government multiple times with different degrees, and 11,500 people's information was missing or incorrect (Akwei, 2017; Iaccino, 2017; Muchemwa, 2017). These results raise important questions about the relationship between system users' competence and HCMIS's efficiency. Information technology (IT) proficiency, human resources (HR) expertise, educational background, professional experience, and employee commitment are all part of the phrase "users' competencies" in this research, whereas completeness, accuracy, and timeliness of data are indicators of HCMIS effectiveness.

The quality of information in HCMIS, specifically in terms of comprehensiveness, accuracy, and promptness, is heavily reliant on the dedication of employees, their qualifications, and their experience in effectively operating the system (Oliveira & Martins, 2020). The effect of user competence on system performance has received scant consideration in prior HCMIS research. Rather, the emphasis has been on the role of HCMIS in decision-making and its implications, problems, and overall influence (Matimbwa & Masue, 2019; Jorojick, 2015). Alternatively, several studies have shown that HCMIS effectiveness is related to user competency (Aziz et al., 2022; Akoyo & Muathe, 2017). In Tanzanian LGAs, there is a dearth of data showing how much HCMIS performance is affected by user capabilities such as IT knowledge, HR knowledge, dedication, experience, and educational qualification. The current research fills this knowledge gap by looking at two things: 1) how user competencies relate to HCMIS performance and 2) how user competencies affect HCMIS performance in Tanzanian LGAs, particularly with regard to the timeliness, completeness, and accuracy of the information provided. This study's working hypothesis is that HCMIS performance is affected by user competencies.



The next section presents the literature review which includes the theoretical framework and empirical review—the following sections are organised as follows: research methodology, discussion of findings, recommendations, conclusions, and suggestions for future research.

THEORIES UNDERPINNING THE STUDY

Theoretical Framework

Human resource managers can use the Integrated Management Competence Model (IMCM) as a guide to help staff members develop the skills necessary to carry out their duties effectively. The competency of employees is defined by this tool as the set of interrelated qualities that are necessary for them to do their jobs well, which might vary from one work activity to another (Lindner, 2001; Vathanophas & Thaingam, 2017). The IMCM is useful for this research because it provides a set of criteria for evaluating user competency, including factors like education level, experience, dedication, and expertise. Launching HCMIS was not an easy task, but its primary goal was to help Human Resource Officers (HROs) make better decisions by enhancing the quality of employee data (Lucia & Lepsinger, 2009). The current study relied heavily on IMCM since it served as the model for analysing the effect of user skills on HCMIS performance, specifically regarding the accuracy, completeness, and timeliness of employee data.

Empirical literature

Users' Competencies

Human Resource Information Systems (HRIS) rely heavily on people's abilities, including managerial and technical expertise to function well (Akoyo & Muathe, 2017). Using the system mainly helps with HRM (Grant & Vogt, 2015) and ICT (Grant & Vogt, 2015) integration, as well as with coming up with cost-effective ways to satisfy business needs and market demands (Mbugua, 2015). Human Capital Management Information Systems (HCMIS) rely heavily on the knowledge and abilities of its IT workers to produce accurate and thoroughly processed data, which is a term used interchangeably among academics (Oliveira & Martins, 2020). Furthermore, studies conducted by Combs et al. (2006) and Mendes and Machado (2015) showed that HCMIS performance is improved when employees have technical skills, strong interpersonal qualities, and relevant information. This is because these employees can quickly adapt to new technology improvements. Nevertheless, according to Nurhayati and Mulyani (2015), user skills are one of the characteristics that have the greatest impact on the accuracy of information in Accounting Information Systems.

Aziz, Salleh, and Mustafa (2022) argue that proficiency, education, training, professional competence, and user disposition towards technology collectively impact the promptness, comprehensiveness, and accuracy of information. Matimbwa, Shilingi, and Masue (2021) found that insufficient training negatively affected the utilisation rate of information systems. With a significance level below 5%, Barus, Putri, and Setiawati (2017) found that the accounting information system's quality of administration was positively and considerably associated with users' proficiency in terms of skills, knowledge, and experience. They also stress that users' competence in the system's development and maintenance is crucial to the system's significance. While previous studies have acknowledged that user competencies affect information system performance, no one has yet identified which user competencies have the greatest bearing on the



efficiency with which Human Capital Management Information Systems (HCMIS) in Tanzanian LGAs function. Filling this gap in the current literature is the main purpose of the present investigation.

METHODOLOGY

This research used an explanatory cross-sectional mixed-method approach to look at how HCMIS performance is related to user abilities. The study just took into account the following mainland Tanzanian regions: Mwanza, Arusha, Dodoma, Morogoro, Iringa, and Kagera. According to the Civil Servants' Auditing Report of 2016 (URT, 2016), these areas had varying degrees of 'ghost' personnel. Areas were selected based on the amount of claimed "ghost" workers, who were then stratified. From the three categories, two regions were randomly selected according to the frequency of "ghost workers": high (> 150), intermediate (< 150 but > 50), and low (< 50). Both URT-Mwanza (2016) and URT-Arusha (2016) found that out of all the regions surveyed, Mwanza had 334 ghost workers and Arusha had 270. Dodoma and Morogoro were two of the nine regions with a moderate incidence of "ghost" workers, according to URT-Dodoma (2016) and URT-Morogoro (2016), respectively. Dodoma had an estimated 139 and Morogoro 122. The two regions with the lowest prevalence of "ghost" workers, according to URT-Iringa (2016) and URT-Kagera (2016), were Iringa (15 cases) and Kagera (14 cases).

The current research was informed by primary data collected over two independent phases. The initial stage commenced by gathering and examining quantitative data that is relevant to the study inquiries, whereas qualitative data was acquired during the subsequent stage. Human resource officers completed the standardised questionnaire to collect quantitative data. The selection of HROs was based on their extensive knowledge and competence in using and implementing the HCMIS in LGAs, as well as their regular usage of the system in their daily responsibilities. The study's sampling frame consisted of all 249 HROs located in the defined areas. The sample size formula developed by Robert and Morgan in 1970 was utilised, resulting in a representative sample of 213 Human Resource Officers. Out of the total of 213 Human Resource Officers (HROs), only 201 were willing to participate willingly. This sample size is considered sufficient for the current study, as supported by previous research conducted by Elamir & Sadeq (2010), Mohammadi et al. (2015), and Matimbwa, Shilingi, & Masue (2021).

We included all LGAs in the regions that were chosen for this analysis. To determine how many HROs were involved in the survey questionnaire, we utilised a proportional sampling approach per district council (Equation 1). The HROs in each district were randomly given the survey questions using Microsoft Excel. The surveys were used to record the responses to the questions. The researchers had two research assistants to help them streamline and speed up the data-gathering procedure. Research assistants were hand-picked for their expertise in HR and information technology (ICT) processes to ensure precise data collecting and a streamlined training process. The data collection training that the assistants received covered a wide range of topics, including human resources processes, enumerator responsibilities, questionnaire administration, data recording, data collecting methods, research ethics and code of conduct, and data collecting procedures.



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

Here, HRO_d is the number of HROs for each chosen district, and s is the sample size per district (i.e., the number of HROs sampled per district/LGAs). Based on the formula proposed by Robert and Morgan (1970), the sample size was 213 HROs, with HROT being the total number of HROs in all sampled regions (i.e., all LGAs in sampled regions) which is 249 HROs.

Qualitative information was obtained by conducting thorough interviews with key sources, encompassing six (6) HRO 'approvers' and two (2) Directors from the Human Capital Division chosen for their expertise in HCMIS. Additionally, secondary data was sourced from pertinent documents such as ICT policies, government reports, and HRIS documents. The initial data underwent analysis employing descriptive statistics and cross-tabulation. An ordered logistic regression model was utilised to explore the influence of system user competencies on HCMIS performance, particularly focusing on IT skills, HR expertise, and employee commitment. The model was formulated with user competencies serving as predictors and HCMIS performance metrics (information completeness, accuracy, and up-to-datedness) as dependent variables. Separate models were created for each performance metric.

The parameters of the model are shown in Equation 2:

$$Prob(Y) = \beta_0 + \beta_{ij} X_{ij} + \dots + \beta_n X_n + \epsilon$$

.....2

Where:

Y = A five-point Likert scale measuring information timeliness, completeness, and accuracy is used to quantify HCMIS performance in LGAs.

"β₀" represents the constant component.

The variables β_{ij}- β_{nj} represent the estimations of the explanatory indicators for predictors 'i' to 'n' in the setting j. In this study, the variables X_{ij} and X_{ij}'s are the user attributes that serve as predictors of Y in setting j.

ε is the symbol for the normally distributed error term.

The dependent variable was evaluated in the following manner: responses were ranked on a five-point Likert scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Agree; 4 = Agree; 5 = Strongly Agree; and neither agree nor disagree. The documentation of user characteristics consisted of categorical or numeric (discrete and continuous) variables. An assessment was made of the multicollinearity of user characteristics to initiate the modelling procedure. Multicollinearity is identified when there is a strong correlation between one or more independent variables and an independent variable. A threshold of r = 0.9 or greater was taken into account in this particular context (Pallant, 2005). The capacity limitations prevented the presentation of the correlation matrix results; however, they did reveal that the highest correlation (r) was 0.401, which signifies that no variable was omitted.



Content analysis was used on the qualitative data to extract meaningful features relevant to the study from the mountains of recorded information or communication. A content analysis was carried out to gain insights into the effectiveness and influence of the HCMIS in enhancing employee data in particular LGAs.

FINDINGS AND DISCUSSION

Demographic Information of HCMIS Users

Table 1 displays the demographic details of HCMIS users. A total of 201 HROs from six selected regions of Mainland Tanzania participated in the survey, with 55 percent being male and 45 percent female. The findings suggest a higher representation of males in the HR department, potentially attributed to a relatively lower number of educated women compared to men. In terms of age distribution, 73 percent of interviewed HROs were between 31 and 40 years old, followed by the age groups of 41-50 years (19 percent), 20-30 years (7 percent), and above 50 years (1 percent). These results indicate that a majority of HROs were youth and middle-aged individuals, with a comparatively smaller representation of older individuals in this role. These findings suggest that a significant portion of Human Resource Officers (HROs) comprised youth and middle-aged individuals, with a lower representation of older individuals in this role. Additionally, the data reveals that 74 percent of the interviewed HROs were married, while the remainder reported being divorced, single, separated, or widowed. The results regarding marital status indicate a prevalent trend of marriage, a characteristic commonly observed in both rural and urban Tanzania, as well as in African societies more broadly.

Table 1: Respondents demographic information

Characteristics	Response Category	Frequency (Percent)
Sex of respondents	Male	110(55)
	Female	91(45)
Age of Respondents	20-30	14(7)
	31-40	146(73)
	41-50	38(19)
	Above 50 years old	3(1)
Marital Status	Marital status	148(74)
	Married	1(0.5)
	Divorced	2(1)
	Separated/widow	48(24)
	Single	2(1)

Source: Field data (2023)

Users' Competencies on HCMIS

Table 2 presents the breakdown of user competencies according to their proficiency in IT skills, HR knowledge, experience, and education level. HROs were requested to evaluate their proficiency or expertise using a three-tiered scale: 1 corresponds to a low level, 2 corresponds to a level that is neither high nor low, and 3 corresponds to a high level. The findings indicate that 44 percent of the HROs who were interviewed lacked adequate IT abilities (at a low level), whereas 21 percent demonstrated proficient IT skills (at a high level), and the remaining 35 percent fell

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within the range between these two skill levels. In terms of HR knowledge, the majority (52 percent) of HROs reported having a high level of HR knowledge, with 8 percent rating themselves at a low level and 40 percent indicating a neutral position (neither high nor low level). Experience in the current position was gauged by inquiring about the number of years HROs had worked, revealing that a majority (56 percent) had accumulated 4 to 7 years of experience. The assessment of user competencies is crucial because it significantly influences HCMIS performance. HROs lacking proficiency in IT skills, HR knowledge, and experience may contribute to subpar HCMIS performance. The results show that LGAs should put their funds into human capital development to boost efficiency, productivity, and effectiveness. This is consistent with the research conducted by other researchers in the field of Health Care Management Information Systems (HCMIS), such as Kassam (2015). Kassam emphasises the need to promote sustainable enhancement in the availability and accessibility of Information and Communication Technology (ICT) skills among HCMIS users. This is done to improve the utilisation of HCMIS in Human Resources (HR) operations. Moreover, it was noted that HROs have a significant level of expertise in HR, which could explain the reduced occurrence of abnormalities in areas that face fewer difficulties with HCMIS.

Table 2: Distribution of Users Competencies on HCMIS

Users' Competencies	Responses	n(%)
Level of information technology skills	Low level	89(44)
	Neither high nor low	70(35)
	High level	42(21)
Level of Human Resource knowledge	Low level	16(8)
	Neither high nor low	80(40)
	High level	105(52)
Years of experience in the current position	Less than three years	49(24)
	4-7 years	113(56)
	8-11 years	28(14)
	12-15 years	10(5)
	Above 15 years	1(0.5)

Source: field data (2023)

Moreover, the relatively extensive work experience among the interviewed HROs contributes to enhanced HCMIS performance, suggesting that individuals with ample experience may outperform their less experienced counterparts. A study conducted by Wahyudi (2018) supported this, demonstrating a significant positive impact of work experience on job performance. Regarding educational qualifications, 81 percent held a Bachelor's degree, 15 percent possessed a Master's degree, and 4 percent had either a diploma or certificate in HR management. In summary, the outcomes presented in Table 2 indicate that a substantial majority (over 80 percent) held at least a bachelor's degree. These findings strongly suggest that HROs possess adequate education, enabling them to generate high-quality information as proficient system users, as affirmed by Chitnum and Ussahawanitchakit (2011). Hence, education emerges as a critical variable, with



well-informed college graduates exhibiting a greater propensity to adopt innovations compared to those with lesser knowledge, in line with the observations of Olatokun and Adebayo (2009), who emphasise the substantial influence of education on information system usage, especially among educated users. Similarly, Yi (2008) contends that individuals with higher educational attainment are more inclined to utilise ICT due to their enhanced skills and increased opportunities for online engagement.

Distribution of user competencies across regions with high, moderate and low levels of HCMIS challenges

Areas with high, moderate, and low HCMIS problem levels are distinguished from one another by the distribution of user characteristics, as shown in Table 3. According to Table 3, places with few HCMIS issues tend to have HROs who are highly knowledgeable in IT, have excellent HR skills, and are wholeheartedly committed to the company. Results from the three groups differed significantly, according to the Chi-square test. With a p-value of less than 001, the Chi-square value for ICT skills was 27.125. The p-value for HR knowledge was less than 001 and the Chi-square value was 40.531. Finally, regarding loyalty to the organisation, the Chi-square value was 23.310 and the p-value was less than 001. Based on the findings, it appears that the Mwanza and Arusha areas' record management issues were caused by a lack of IT skills among the staff. For this reason, it stands to reason that HROs with more sophisticated ICT skills will be more adept at using the system than their competitors. This confirms what Hertati and Zarkasyi (2015) found: that users' knowledge, talent, and commitment work together to produce complete and accurate data.

Each of the three groups had about the same amount of job experience as the other. According to Table 3, a higher number of highly experienced workers with 8-11 years of work experience was found in regions classified as medium and low, in contrast to regions classified as high. Higher levels of bachelor's and master's degree holding HROs were more common in areas with more severe HCMIS problems compared to areas with moderate or low levels of difficulty, according to an examination of educational attainment across the three groups. The chi-square value was 3.453 with a p-value of 0.485 (Table 2), indicating that there was no statistically significant difference in the distinction among the three groups.

These results indicate that relying solely on academic certificates is not enough to guarantee that employees become proficient system users. This inadequacy is attributed to the absence of specific training in the system's application within the HROs' college education. Therefore, addressing this gap in competence could be effectively achieved through a review of the curriculum. The findings related to education stand in contrast to the Integrated Management Competence Model, suggesting that, according to this model, highly educated individuals are expected to achieve the desired results.



Table 3: User competencies and levels of HCMIS challenges

Attributes	Scale	Level of HCMIS 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 (2023)



Influence of Users' competencies on HCMIS performance

According to the information on model fitting, the entered data adequately corresponded to the models, and at least one of the predictors showed a strong correlation with the response variable. The Goodness-of-match study reveals that the match for timeliness across the three models is not notably robust ($p = 0.004$). Completeness and accuracy are two more variables where the model fits the data well, as indicated by the substantial p -values. An unreliable outcome predictor is a model that incorporates user competencies, according to the results of the Pseudo R-square Statistics, specifically the Nagelkerke values (0.251 for timeliness, 10.3% for completeness, and 10.3% for accuracy). You may learn a lot about the impact of predictor variables from the parameter estimates that are in Table 4. The Wald statistic test, commonly used to assess the null hypothesis, is included in the table. All three models' Wald statistics are positive, showing that HCMIS performance is significantly affected by user competencies in terms of Completeness, Accuracy, and Timeliness. As a result, we accept the alternative hypothesis and reject the null.

Table 4 shows the values of the regression coefficients (β). At least one user competency out of five showed negative β -values for each dependent variable, which means that they negatively impacted HCMIS performance. On the other hand, for each dependent variable, four out of five skills shown positive benefits. In addition, the findings indicate that the HCMIS's performance is significantly affected by the users' skills and talents. Only two user attributes—IT proficiency ($\beta = 0.452$, $p = 0.002$) and organisational dedication ($\beta = 0.889$, $p < 0.01$)—provided a statistically significant impact on the HCMIS's performance with punctuality. Comprehensiveness was significantly affected by both employee commitment ($\beta = 0.464$, $p = 0.031$) and work experience ($\beta = 0.46$, $p = 0.006$). Only one component of user competence, specifically IT skills, showed a statistically significant impact on accuracy ($\beta = 0.329$, $p = 0.023$), as shown in Table 4.

Commitment (0.889), IT skills (0.452), HR knowledge (0.32), and work experience (0.234) are the user abilities that significantly influence HCMIS performance, as indicated by the size of the β coefficients for timeliness. Surprisingly, education level is the characteristic that affects HCMIS performance timeliness negatively (-0.098). The data produced by the system is comprehensive. The most important competencies are the user's level of education (with a weight of 0.159), their level of experience (with a weight of 0.464), their degree of IT competence (with a weight of 0.231), and overall level of dedication. However with a weight of -0.027, HR knowledge is negatively correlated. Out of all the criteria that affect accuracy, the three most important ones are IT skills (0.329), employment experience (0.274), and commitment (0.033). Conversely, there is a negative correlation between HR knowledge (-0.052) and education level (-0.162), with the latter having the strongest negative correlation. According to the study's results, trustworthiness and candour are more significant than a user's level of knowledge when determining a system's worth. As per the Director of Human Capital Division (DHCD):

Among the many difficulties encountered by HROs in LGAs is the widespread disregard for established protocols and rules. The Director of the Human Capital Division has found that certain officers are dishonest and will often bend the rules to their advantage or the advantage of others in their department (Director Human Capital Division).



When asked about the shortcomings of HROs in LGAs, another officer responded honestly, saying:

Some cops are dishonest and don't care about their work. Even while measures such as termination of employment contracts and legal actions are typically taken against breaches of confidentiality, protecting the privacy of employees' information remains a significant concern. (HRO from the Ministry of Public Service Management and Good Governance).

According to a Human Resources Officer (HRO) at the Morogoro Municipal exhibit that:

The District Education Officer once accused me of being lazy and lacking dedication due to the delays in processing the pay of new employees. During the 2014 teachers' employment, I postponed the pay of recently hired teachers whose job details had already been entered into the system. Upon contacting the Public Service Commission in Dar es Salaam for an update, I was informed that the delay was caused by permission delays. This was attributed to the fact that the individual in charge had been temporarily assigned to an acting capacity in another position within the Commission. Upon my return from Dar es Salaam, the DEOs and affected instructors displayed a lack of comprehension of the situation (HRO Morogoro Municipal).

Additional researchers have also highlighted the importance of IT proficiency, dedication, and prior experience in impacting the success of HCMIS. According to Njau (2017), the utilisation of IT skills in Mwanza Municipality is limited to just 43.3 percent due to a lack of competence in the field. This lack of IT knowledge poses a hurdle to the effective usage of systems. Hence, possessing IT skills is an essential requirement for the efficient utilisation of the system in any organisation, especially Local Government Authorities (LGAs). This remark is consistent with the perspectives offered by a High-Reliability Organisation (HRO) representative from UTUMISHI. The HRO representative discussed the difficulties that approvers encounter while interacting with HROs in Local Government Authorities (LGAs) and said the following:

".... One notable issue I encounter is the widespread lack of computer proficiency among human resource officers, to the extent that some face difficulties in even attaching documents in PDF format." Furthermore, several officials exhibit a lack of information regarding policies or procedures, and it is frequently observed that individuals utilise obsolete methods.



Table 4: Parameter estimates for user competencies

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



Consistent with earlier HCMIS research, this study confirms what Kassam (2015) found: that individuals with extensive expertise in relevant technologies are more likely to obtain up-to-date and relevant data. User capabilities were identified by Zote and Tole (2018) as one of the three primary elements that impact information quality. Their research shows that information quality can be enhanced when company personnel have a good grasp of the system. When it comes to getting up-to-date information, user dedication is key, according to Chitmun and Ussahawanitchakit (2011). According to Gelinas and Dull (2012) and Simba and Mwanga (2006), the quality of the information that an information system produces is also dependent on the users' abilities and knowledge.

Workers who exhibit commitment, here understood as "the quality of being dedicated to a cause or activity," tend to outperform their counterparts who do not. Cooperative behaviours are essential for building long-term, mutually beneficial relationships, and they immediately arise from relational exchanges between a corporation and its different stakeholders. This is according to the 'commitment-trust' theory within relationship marketing (Morgan and Hunt, 1994). Specifically, Allen and Meyer (1991) distinguished between "continuance," "normative," and "effective" commitment. Company promotion of successful employee commitment is crucial, even though the study does not definitively address the effect of commitment type on the performance of HCMIS in Tanzanian LGAs. To achieve this goal, it is essential to hire qualified individuals, treat them fairly while still maintaining trust, raise their salary and benefits, promote a good work-life balance, promote from within frequently, and cultivate positive relationships with both coworkers and managers (Robinson, 2003).

A Human Resource Officer from UTUMISHI highlighted the impact of employee lack of commitment on HCMIS performance. When addressing the challenges faced by approvers in dealing with HROs in LGAs, the HRO stated that: *'the lack of awareness regarding the relevant system to be followed leads to inefficiency on the part of the officer. The inefficiency is ascribed to a deficiency in dedication towards a specific work.'*

CONCLUSION

In conclusion, positive correlation coefficients were identified in five factors that were analysed against effectiveness. This indicates that a majority of user skills with positive coefficients contribute to the improvement of HCMIS performance in terms of completeness, timeliness, and accuracy. IT skills, commitment, and experience emerged as three user competency variables with a statistically significant influence on HCMIS success. According to the study, to achieve the best possible performance from an HCMIS, the three most important factors are competent knowledge of the system (IT skills), employee commitment to their work (commitment), and general experience with the system. Notably, IT skills are the only variable that can be acquired through learning. Consequently, employers should invest in HCMIS training to ensure effective system utilization. Moreover, the size of the coefficients determines the extent of the impact of user competencies on HCMIS performance. Commitment exhibits a more substantial influence on attaining timely and complete outputs compared to the other two variables. On the other hand, it appears that HR knowledge and education levels have a detrimental effect on performance when it comes to information completeness and timeliness, respectively. Finding accurate outputs (accuracy) seems to be most affected by IT skills, whereas HR knowledge seems to have the most negative effect.



The following suggestions are made in light of the facts and the conclusions: As a first step, LGAs should make it a top priority to provide ongoing training in HR and IT skills to HCMIS employees so that they can better serve their communities. As for the second piece of advice, LGAs should hire more dedicated HCMIS workers and work to build trust among workers by creating an environment that values equality, openness, and input. Thirdly, it is important to increase the usage of HCMIS by encouraging employees in LGAs to share their experiences, since there is a strong correlation between this and HRIS utilisation.

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