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# THE INFLUENCE OF EMPLOYEES' ATTITUDES TOWARDS IMPLEMENTING FINANCIAL MANAGEMENT INFORMATION SYSTEMS IN PUBLIC INSTITUTIONS IN TANZANIA

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## Abstract

Employees are the key players in successfully implementing the Financial Management Information Systems (FMIS) in public institutions. Therefore, it is important to understand and address the attitudes of employees towards behavioural intentions to use these systems. However, the empirical evidence specifically targeting FMIS implementation in public institutions is limited. This study determined the influence of employees' attitudes towards implementing FMIS in public institutions. The study adopted a quantitative research approach and the Decomposed Theory of Planned Behaviour (DTPB) in which a structured questionnaire was used to collect primary data. The study applied data analysis through SPSS to test Pearson Chi-Square, One-Way ANOVA and Ordinal Regression Analysis. The study found that attitudes influence the implementation of FMIS in public institutions. The findings suggest that public institutions have to strategise how to change the attitudes of employees to adapt to the use of information systems. The institutions should work towards complete participation of employees in the requirements of system users, adequate communication during implementation, hands-on training, and full support from developers of such systems. Also, the government must ensure that all the employees who are the principal users of these systems know the benefits of these accounting systems in day-to-day operations.

**Keywords:** *Financial Management Information Systems, FMIS Implementation, Public organisations, Attitude, Ease of Use, Perceived Usefulness, Compatibility*

## 1.0 INTRODUCTION

Implementing Financial Management Information Systems (FMIS) in public institutions has become a critical point of interest in contemporary information technology management, public administration, and financial management studies. FMIS are interconnected accounting systems intended to manage financial resources effectively and efficiently (Elsaman, 2022). Nevertheless, FMIS provide appropriate, timely, and accurate financial information that helps decision-making processes and enhances accountability in public sector operations (Ahmed *et al.*, 2023; Limerick, 2023; Simpson *et al.*, 2020). The FMIS promote trust in the public eye by improving transparency, streamlining financial operations, and facilitating compliance with regulatory frameworks (Uña, 2019).

FMIS has historically evolved from the late 20th century when public sector organisations started recognising a greater need for sophisticated financial management tools to assist them in coping with the increasing demands of efficiency and accountability. It was considered a major transformation in public financial management practices from traditional manual accounting information systems to automated FMIS (Diamond & Khemani, 2006; Brusca *et al.*, 2016). This transition was driven by rapid development in information technologies and



the growing complexity of financial operations within the public sector, which required systems to support the availability of financial information and analytics with ever-increasing depth (Azevedo *et al.*, 2020).

The introduction of FMIS in public organisations is required to improve the overall efficiency of public sector organisations (Chen *et al.*, 2021). If FMIS is implemented properly, it will improve the timeliness of financial operations and the accuracy and reliability of financial reporting, and it will greatly promote good budgetary control and resource allocation. Secondly, they are vital in encouraging good governance and ensuring that money meant for public utilisation serves its purpose and that financial information becomes available to stakeholders, which are the citizens and regulatory bodies (Pasape & Godson, 2022). In developing countries, it is even more imperative to implement FMIS, as the said systems can help accost problems related to corruption, financial mismanagement and inefficiency in delivering public services (Azevedo *et al.*, 2020).

From a global perspective, the status of the implementation of FMIS varies across different geographical contexts. In this regard, in the context of developed countries, the FMIS are well-implemented in the overall setup of the public financial management framework, supported by strong institutional capacities and regulatory environments. According to Uña (2019), Sweden and Canada have implemented FMIS according to national standards that accord with international best practices. On the contrary, in many developing countries, implementation of FMIS faces numerous challenges. For example, Pasape and Godson (2022) found that inadequate infrastructure, limited technical expertise, and resistance from employees who may be sceptical about the benefits of such systems are the main challenges when implementing FMIS.

Narrowing it down to Tanzania, the government has taken several initiatives and a number of reforms to adopt and implement FMIS (Pasape & Godson, 2022). In the Financial Year (FY) 2019/20, the Government Payment System, "Mfumo wa malipo ya Serikali" in Swahili, or MUSE, started to replace the former government financial management system IFMS Epicor in the financial year (NAOT, 2021). Moreover, the government released treasury circular No.5 of 2019, demanding all Accounting Officers in public institutions to adopt FMIS (NAOT, 2021). Later, the Permanent Secretary for the Ministry of Finance and Planning in April 2020 directed all Chief Accounting Officers (CEO) in all Government



institutions to use MUSE (NAOT, 2023).

Despite all the reforms and initiatives, local government authorities reported significant obstacles to FMIS implementation, including technical difficulties and user-related challenges such as attitude, which hinder the effective use of these systems (Pasape & Godson, 2022). Nevertheless, in his FY 2021/22 report, the CAG reported that out of 206 Authorities and other Bodies (PA & oBs), 36 entities were exempted from compliance, while 174 were supposed to use MUSE. Nevertheless, out of the 174 entities, 100 institutions (57%) were not using MUSE for various reasons, including the complexity of business operations. Of the 74 PA & oBs using MUSE, 42 entities (56%) reported various challenges in implementing MUSE (NAOT, 2023). Again, in FY 2022/23, the CAG reported that 36 government entities were not using MUSE, mentioning system challenges and the need for training (NAOT, 2024).

As a key component of the Decomposed Theory of Planned Behaviour (DTPB), attitudes significantly influence the behavioural intentions of an individual, particularly in adopting new technologies such as FMIS in public organisations. The DTPB theorises that attitudes are formed by specific beliefs regarding the usefulness, ease of use, and compatibility of the technology being considered. These determinants collectively impact attitude towards the technology, which in turn affects the intention to implement it within an organisational context (Giovanis *et al.*, 2019; Khasawneh & Irshaidat, 2017; Al-Qahtani *et al.*, 2019). Positive attitudes among public servants can lead to better engagement with FMIS, which enhances financial management practices.

Many studies (Alfani *et al.*, 2023; Al-Qahtani *et al.*, 2019; Chang *et al.*, 2021; Pérez & Vélez-Jaramillo, 2021; Putra *et al.*, 2022; Tsai *et al.*, 2022) were carried to investigate the relationship between attitude (the usefulness, ease of use, and compatibility) and implementing FMIS (intention to use/adopt/implement technology). However, many of the mentioned studies do not fully reflect the situation in the Tanzanian context in which the working environment is different and psychological barriers that may affect attitudes towards technology adoption in public organisations vary from place to place. This points to the importance of targeted interventions that consider the diverse attitudes present within public organisations, promoting a sense of inclusivity and understanding. Nevertheless, those studies investigated factors that influence the behavioural intention to use technology without determining the



extent to which such factors influence such decisions. Additionally, empirical evidence specifically targeting FMIS implementation in public institutions is limited, necessitating this study to determine the employee's attitudes in the context of individual behavioural intentions to use technology as it is a critical area of study, mainly as governments increasingly rely on technology for efficient management and service delivery.

## **2.0 OBJECTIVE OF THE STUDY**

This study determined how attitude affects the implementation of Financial Management Information Systems (FMIS) in public organisations in Tanzania, specifically how employees' perceptions of the usefulness, ease of use, and compatibility of FMIS influence their behavioural intention to adopt and utilise these systems. The study was motivated by the continuous reports by CAG on the slow adoption of MUSE due to system, technical and user-related challenges in implementing FMIS in Tanzania, whereby the study collected data to determine the perceptions of the employees who are key players in adopting FMIS.

## **3.0 LITERATURE REVIEW**

This section presents a theoretical and empirical literature review on the attitudes of employees towards the implementation of Financial Management Information Systems (FMIS).

### ***3.1 Theoretical Literature Review***

This part presents theories and conceptual frameworks adopted to accomplish the study.

#### ***The Decomposed Theory of Planned Behaviour (DTPB)***

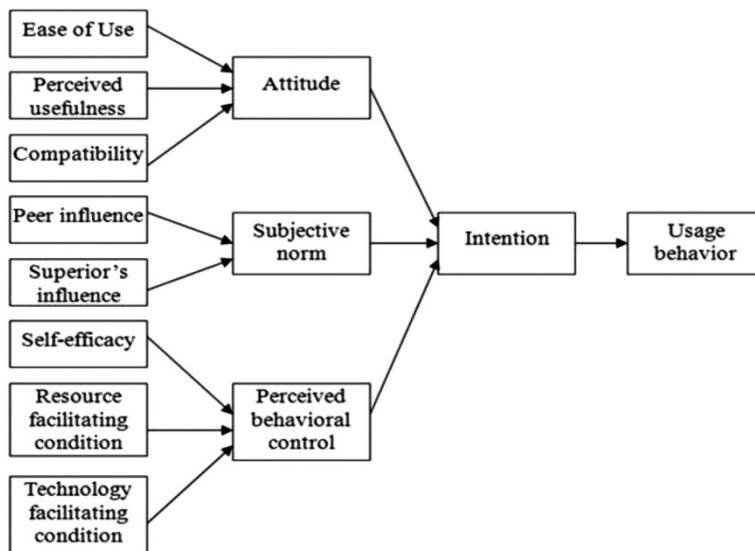
The Decomposed Theory of Planned Behaviour (DTPB), as presented in Figure 1, is a robust framework for understanding the factors influencing behavioural intentions to use (BIU), particularly in technology adoption and acceptance within public organisations. This theory extends the traditional Theory of Planned Behaviour - TPB (Ajzen, 1991) by decomposing its core constructs—attitude, subjective norms, and perceived behavioural control—into more specific antecedents that can better explain the complexities of user intentions (Taylor & Todd, 1995) toward adopting new technologies, such as FMIS (Puah *et al.*, 2021). The decomposition of TPB allows for a more complex analysis of how individual beliefs and social influences shape the intention to engage with technology to enhance the explanatory power of the model in various contexts, including education, marketing, health, consumer behaviour, etc. (Puah *et*



*al.*, 2021; Ooi, 2024; Eljack, 2023).

The DTPB provides a comprehensive framework to explain behavioural intentions of using technology. For example, suppose employees believe FMIS to be more ease of use, useful to daily duties and compatible with the working environment. In that case, they will have a positive perception of the system. This will contribute towards the behavioural intention of using that particular system, which in return assists successful implementation (Pasape & Godson, 2022). However, many studies ignored the effect of compatibility when researching for the effect of attitudes towards intention to use information system.

**Figure 1: The Decomposed Theory of Planned Behaviour (DTPB)**



Source: Taylor and Todd (1995)

### ***Behavioural Intention to Use Technology***

In DTPB, attitudes directly influence the behavioural intention to use (BIU) technology, which is the dependent variable in this context. When employees in public organisations hold positive attitudes towards FMIS—fuelled by beliefs in its perceived ease of use (PEOU), perceived usefulness (PU) and compatibility—they are more likely to express a strong intention to implement and utilise the system effectively (Tsai *et al.*, 2022; Chang *et al.*, 2021). Conversely, negative attitudes stemming from doubts about these determinants can lead to resistance against adopting the technology, thereby hindering its successful implementation (Bashir & Bastola, 2018). Organisations can develop strategies to enhance positive attitudes towards FMIS, ultimately facilitating its successful adoption and integration into public sector



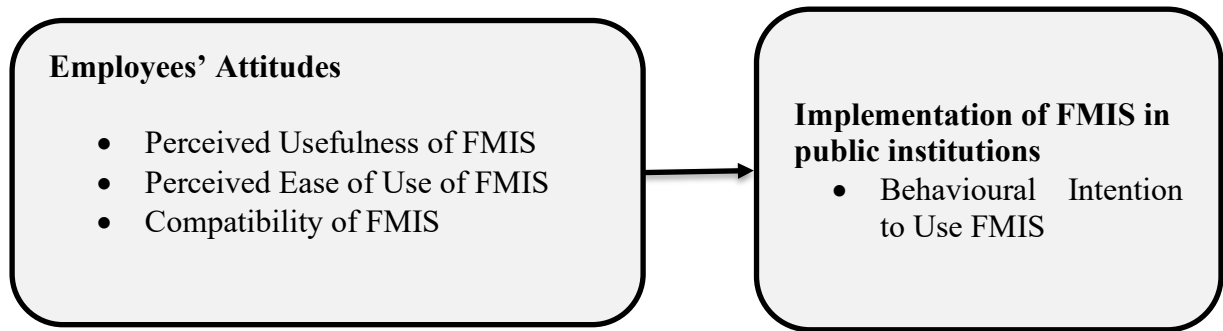
operations (Giovanis *et al.*, 2019; Tsai *et al.*, 2022; Chang *et al.*, 2021). The study adopted behavioural intention to use technology as a determinant of the dependent variable: implementing FMIS in public organisations, as depicted in **Figure 2**.

### *Attitude*

Attitude, as a decomposed construct in the DTPB, encompasses beliefs about the outcomes of using FMIS and evaluating these outcomes. Attitude is the feeling people have about the attractiveness or undesirability of a particular behaviour (Ajzen, 1991). A positive attitude towards FMIS can stem from perceived advantages such as improved efficiency, better financial reporting, and enhanced decision-making capabilities (Soon *et al.*, 2020). Furthermore, the relationship between attitude and behavioural intention is well-documented, with empirical evidence suggesting that favourable attitudes lead to a higher likelihood of adopting new technologies (Sahli & Legohérel, 2014).

Employees' attitudes towards FMIS implementation are shaped by their beliefs about the system's usefulness, ease of use, and compatibility as adopted from DTPB. Positive attitudes can lead to increased engagement and successful implementation. For instance, Wielicka-Gańczarczyk and Jonek-Kowalska (2023) found that employees' attitudes towards risk management are aligned with best practices, suggesting that favourable attitudes can facilitate the adoption of new systems. Similarly, Park *et al.* (2018) confirmed that both PU and PEOU significantly influence users' attitudes and intentions towards health information exchange systems. Furthermore, Raninda *et al.* (2022) indicated that perceived usefulness and ease of use directly affect behavioural intention towards e-wallets, reinforcing the notion that users are more likely to adopt beneficial technologies. This suggests that fostering positive attitudes towards FMIS could enhance its implementation success. Additionally, Pérez and Vélez-Jaramillo (2021) highlight that employees' perceptions of technological changes can affect their attitudes, which is crucial in implementing FMIS. Therefore, positive attitudes towards technology are linked to higher intentions to use such systems, as individuals are more likely to engage with tools they perceive as beneficial (Natawibawa *et al.*, 2018). Hence, the study adopted the attitude and measured its determinants: ease of use, perceived usefulness and compatibility, as presented in **Figure 2**.

**Figure 2: Conceptual framework**



Source: Author's concept derived from DTPB theory (2023)

### **3.2 Empirical Literature Review**

#### **Perceived Ease of Use**

The Perceived ease of use (PEOU) is the extent to which the technology is perceived as user-friendly. For example, employees believe it is easy to navigate and use FMIS when they maintain positive attitudes, which will increase the likelihood of adopting accounting systems (Khasawneh & Irshaidat, 2017).

The PEOU is a fundamental construct in technology acceptance theories, including the DTPB. Several studies have found a positive correlation between PEOU and behavioural intention to use various technologies. Alfani *et al.* (2023) found that perceived ease of use significantly influences behavioural intention among mobile banking users, in which they emphasised the importance of usability in technology adoption. Also, Sobti (2019) studied mobile payment services in India, stressing that younger users prioritise ease of use, directly affecting their intention to adopt such technologies. Furthermore, Hansen *et al.* (2018) revealed that PEOU positively moderates the effect of perceived behavioural control on the intention to use social media for transactions. In the context of e-governance, Al-Haddad *et al.* (2023) determined that ease of use influences the adoption of electronic government services, reinforcing the picture that user-friendly systems are more likely to be accepted. However, studies such as Maria (2023) suggest that not all the time, perceived ease of use always correlates with behavioural intention. Hence, she stresses that other factors may also play a significant role. The inconsistency in findings depicts a gap in studying the specific conditions under which PEOU influences behavioural intention, particularly in the context of FMIS in public organisations. The methodology employed in these studies varies, with some relying on quantitative





approaches such as surveys and structural equation modeling, while others utilise qualitative methods. For instance, Alfani et al. (2023) and Sobti (2019) employed survey methodologies to gather user data, allowing for statistical analysis of the relationships between PEOU and behavioural intention. However, a potential gap in these methodologies is the lack of consideration for contextual factors that may influence user perceptions of ease of use. For example, perceived usefulness and compatibility of the FMIS being implemented could significantly affect users' perceptions but are often overlooked in empirical studies.

Moreover, while the studies mentioned provide valuable insights into the relationship between PEOU and technology adoption, they often fail to explore the interplay between PEOU and other constructs such as perceived usefulness (PU) and system compatibility. For instance, Alkhwalidi et al. (2022) integrated the Unified Theory of Acceptance and Use of Technology (UTAUT) and Task-Technology Fit (TTF) to investigate HRIS adoption in public sector organisations, suggesting that a more integrated approach could yield richer insights into technology acceptance dynamics. This indicates a need for future research to adopt a more holistic view that considers multiple factors influencing the adoption of FMIS in public institutions. Nevertheless, there is a need to apply other theories, such as DTPB to investigate the effect of PEOU. Furthermore, the findings from these studies often emphasise the importance of user-friendly interfaces and systems. However, they do not adequately address the potential barriers to achieving such user-friendliness, such as the complexity of the technology itself or the varying levels of digital literacy among users. For instance, while Hansen et al. (2018) highlight the moderating effect of PEOU on behavioural control, they did not dig into how different user demographics might experience varying levels of ease of use, which could lead to disparities in technology adoption rates.

### *Alternative Hypothesis 1*

**H1:** There is a significant relationship between the ease of use of FMIS and behavioural intention to use it in public organisations.

### *Perceived Usefulness*

The concept of perceived usefulness (PU) is pivotal in understanding the adoption of technology, particularly in the context of Financial Management Information Systems (FMIS) within public institutions. PU refers to the degree to which users believe that utilising a specific



technology will enhance their job performance or productivity. In the case of FMIS, public employees who perceive the system as a tool that streamlines financial processes and enhances accuracy are likely to develop a favorable attitude towards its usage. This notion is supported by Al-Qahtani et al. (2019), who emphasise that positive perceptions of technology can significantly influence user acceptance and engagement with the system (Stage et al., 2015).

The significance of PU is further underscored within the framework of the Decomposed Theory of Planned Behavior (DTPB), which posits that PU is a critical determinant affecting behavioral intentions to use technology (BIU). Research consistently demonstrates that higher levels of perceived usefulness correlate with increased intentions to adopt technology. For instance, To and Trinh (2021) illustrate that trust influences BIU through the mediation of PU, thereby highlighting the importance of perceived usefulness in technology adoption processes (Shin, 2023). Similarly, Zhao and Liu (2019) argue that PU is a fundamental precursor to citizens' intentions to adopt e-government services, reinforcing its relevance in the public sector's technology acceptance landscape (Aman & Kasimin, 2011). However, despite these insights, there remains a notable gap in the literature regarding the comprehensive profiling of perceived usefulness and its role in shaping behavioral intentions across various practices, particularly in public sector implementations.

The methodology employed in these studies typically involves quantitative approaches, such as surveys and structural equation modeling, to assess the relationships between PU, trust, and BIU. For example, To and Trinh (2021) utilised a survey-based methodology to gather data from users of mobile wallets, analysing the mediating role of PU in the relationship between trust and BIU (Shin, 2023). Similarly, Zhao and Liu (2019) conducted surveys to evaluate the factors influencing citizens' intentions to adopt e-government services, emphasising the role of PU as a significant predictor (Aman & Kasimin, 2011). However, these methodologies may exhibit limitations, such as reliance on self-reported data, which can introduce bias and affect the validity of the findings. Additionally, the studies predominantly focus on specific technological contexts, which may not fully capture the diverse factors influencing PU in the broader public sector landscape.

In the context of FMIS, the findings from these studies suggest that enhancing perceived usefulness can lead to increased acceptance and utilisation of the system among public



employees. For instance, if public institutions can demonstrate the effectiveness of FMIS in improving financial accuracy and efficiency, employees are more likely to perceive the system as beneficial, thus fostering a positive attitude towards its implementation. However, the existing literature lacks a robust exploration of the specific attributes that contribute to perceived usefulness in FMIS, particularly in the public sector. This gap indicates a need for further empirical research that delves into the unique characteristics of FMIS and how they align with the expectations and needs of public employees.

Moreover, while the DTPB framework provides a valuable lens for understanding the relationship between PU and BIU, it is essential to consider additional factors that may influence this dynamic. For instance, perceived ease of use and compatibility can significantly impact employees' perceptions of usefulness and their subsequent intentions to adopt FMIS. This study aims to integrate these contextual factors into the analysis of PU, thereby offering a more comprehensive understanding of the determinants of technology acceptance in public institutions.

### *Alternative Hypothesis 2*

**H2:** There is a significant relationship between the perceived usefulness of FMIS and behavioural intention to use it in public organisations.

### *Compatibility*

The concept of compatibility is pivotal in understanding the adoption of new technologies, particularly in the context of Financial Management Information Systems (FMIS) within public institutions. Compatibility refers to the degree to which a new technology aligns with existing values, past experiences, and organisational practices. This alignment can significantly influence users' attitudes towards the technology, suggesting that a high level of compatibility may facilitate a smoother transition to FMIS, thereby enhancing its perceived usefulness (PU) and perceived ease of use (PEOU) (Gwara et al., 2022; Saha et al., 2020). The empirical literature, however, indicates that compatibility has received less attention than PU and PEOU, which raises questions about the comprehensive understanding of technology acceptance in public organisations. Putra et al. (2022) conducted a study focusing on the intentions to use FMIS in local governments, emphasising the importance of compatibility. Their findings suggest that technologies perceived as compatible with existing practices are more likely to be



adopted. This aligns with the Decomposed Theory of Planned Behavior (DTPB), which posits that behavioural intentions are influenced by attitudes, subjective norms, and perceived behavioural control, all of which can be affected by the perceived compatibility of the technology (Al-Qahtani et al., 2019; Gunawan et al., 2019). However, while Putra et al. (2022) provide valuable insights, their study lacks a diverse sample across different public institutions, which may limit the generalizability of their findings. A more comprehensive approach could involve a comparative analysis across various governmental levels and types to fully understand the implications of compatibility in FMIS adoption.

Similarly, Giri and Manohar (2021) explored the acceptance of blockchain technologies among supply chain practitioners and found that compatibility significantly influences technology acceptance. Their research underscores the relevance of compatibility across different technological contexts, reinforcing the notion that this determinant is critical for successful technology adoption (Puah et al., 2021; Ye et al., 2019). However, the methodology employed in their study primarily relied on quantitative surveys, which may overlook the nuanced qualitative insights that could emerge from in-depth interviews or focus groups. Future research could benefit from a mixed-methods approach to capture the complexities of user experiences and perceptions regarding compatibility in FMIS.

Despite these contributions, there remains a notable gap in empirical evidence specifically addressing compatibility within the FMIS context. The literature indicates a limited focus on how compatibility interacts with behavioural intentions in public organisations, suggesting a need for integrated studies that examine this relationship more deeply (Fernando, 2021; Azalan et al., 2022). The DTPB framework provides a robust basis for such investigations, as it allows for the disaggregation of factors influencing behavioural intention, including the role of compatibility. A research can better understand how users' perceptions of compatibility may positively or negatively impact FMIS adoption when the DTPB framework is applied..

Furthermore, the existing studies often fail to consider the dynamic nature of public institutions, where organisational culture and structure can significantly influence technology acceptance. For instance, Al-Qahtani et al. (2019) highlight the importance of cultural factors in technology adoption, suggesting that compatibility must also be viewed through the lens of organisational culture (Giovanis et al., 2019; Ay, 2023). This perspective is crucial for understanding how



varying cultural contexts within public institutions can shape users' perceptions of compatibility and, consequently, their intentions to adopt FMIS. It should be noted that even if the empirical studies reviewed provide valuable insights into the role of compatibility in technology acceptance, particularly in the context of FMIS in public institutions, significant methodological gaps need to be addressed. Therefore, this study aimed to employ diverse methodologies, including quantitative approaches, to capture the complexities of user experiences. Additionally, integrating the DTPB framework can enhance our understanding of how compatibility interacts with other determinants of technology acceptance, ultimately leading to more effective strategies for promoting FMIS adoption in public organisations.

### *Alternative Hypothesis 3*

**H3:** There is a significant relationship between the compatibility of the FMIS and behavioural intention to use it in public organisations

## **4.0 METHODOLOGY**

The nature of this study necessitates a quantitative enquiry because it is specifically useful in providing objective, empirical evidence through numerical data and subjected to rigorous statistical analysis (Mwaijande, 2024). The study tested research hypotheses (Elias & Lubua, 2021) as detailed in section 3.0 of the paper. The application of hypothesis testing also accentuates the objective characteristic of the study, thus providing an opportunity to employ standardised scientific sampling methods and procedures from positivism, whereby objectivity plays a crucial role in this research design (Muharsih, 2023). Therefore, the research maintained methodological coherence in the quantitative study (Nyein *et al.*, 2020) to portray results as generalisable (Maula & Stam, 2019; Tiwasing *et al.*, 2023; Yeoh, 2023). Quantitative research is highly structured and follows a systematic procedure that uses numeric data to examine relationships between variables or generate statistical accounts (Mahmud, 2023). This approach not only increases the reliability of the findings, but it also has great potential to be able to apply on larger societal populations which are like the participated group (Mohajan, 2020).

**Table 1** provides a summary of the key components of the structured survey questionnaire in facilitating the collection of quality and relevant data in minimising biases that could distort the findings (Hewlett & Werbeloff, 2022).



**Table 1: *The Nature of the questionnaire***

<b>Variable</b>	<b>Information Extracted</b>	<b>Nature</b>
Demographic	Gender	Nominal
	Age group	Ordinal
	Work experience	Ordinal
Perceived Ease of Use (PEOU)	The perception of the user on the extent to which the technology is perceived as user-friendly	Ordinal
Perceived Usefulness (PU)	The degree to which an individual believes using a particular technology will enhance their job performance or productivity	Ordinal
Compatibility	The perceptions of users on how well the new system aligns with existing values, past experiences, and organisational practices	Ordinal
Behavioural Intention to Use FMIS	The degree to which a person has formulated conscious plans to use or not use technology in the future	Ordinal

Source: Author’s data (2024)

#### **4.1 Sampling**

From the total study population, which was 73, the sample size was deduced using Yamane's (1967) formula for calculating sample size,

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = sample size

N = Population size

e = the acceptable sampling errors

Using the above formula where N = 73, and e = 0.05, the required sample will be calculated as follows:

$$n = \frac{73}{1 + 73(0.05)^2}$$

n = 61.73, approximately 62



The sample size calculated for the research was approximately 62. Still, data collection was done from 73 individuals to include the overall population, which strengthens the findings more, as stressed by Aziz et al. (2020) and Samel-Kowalik et al. (2019).

#### **4.2 Data collection methods**

The study selected MUSE as a case study, collecting data from 73 staff members at a public institution in Arusha, Tanzania, from August to October 2023. However, only 63 (i.e., 86%) responses were completed and collected back. The sample size is considered sufficient for quantitative analysis to achieve statistical power and reliability in research findings (Bujang, 2021; Curtis, 2023).

The primary data collection process was executed through direct physical administration, ensuring that the responses were gathered in a controlled environment conducive to obtaining accurate data (Muharsih, 2023). The study employed a 5-Likert Scale structured questionnaire consisting solely of closed-ended questions to effectively align with the quantitative research paradigm in applying various statistical techniques (Gürkan & Kahraman, 2022).

#### **4.3 Data analysis**

The hypotheses outlined in section 3.0 of the study aim to explore causal relationships among ordinal variables, as indicated in Table 1. The choice of ordinal regression as the analytical method is its appropriateness for modeling relationships where the dependent variable is ordinal in nature (Elias & Lubua, 2021; Meiza, 2023; Wang et al., 2022), as it accounts for the ordered nature of the response categories.

Table 2 summarises the primary relationships examined in the study and the model employed for analysis.

**Table 2: The Analysis of Variables**

No	Input variables	Output Variables	Analysis Model
1	Perceived Ease of Use	Behavioural Intention to Use FMIS	Ordinal Regression
2	Perceived Usefulness	Behavioural Intention to Use FMIS	Ordinal Regression
3	Compatibility	Behavioural Intention to Use FMIS	Ordinal



			Regression
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Source: Research data (2023)

#### ***4.4 Quality procedures***

Although only 62 responses were required, the decision to involve the whole population ensured that data remained representative, underlining the importance of high response rates for data validity. These are in agreement with Gentil et al. (2017) and Girwar et al. (2021). This is a holistic approach that best practices in community-based research adopt, encouraging inclusivity and enriching data analysis. This view is supported by Essay et al. (2023) and Apol et al. (2021). Ultimately, this research underlines the importance of refined methodologies for reinforcing the reliability of results from the studies (Nielsen et al., 2023). The validity of the study is ensured through rigorous data collection methods, including the physical administration of the questionnaire to allow for controlled conditions and ensuring that responses are obtained solely from the intended participants, as stressed by Tutz (2021). The reliability of the instrument was assessed using Cronbach's Alpha, producing a coefficient of 0.71, which exceeds the acceptable threshold of 0.6, as noted by literature (Tutz, 2021; Self et al., 2020). This finding aligns with the standards in contemporary research, where a Cronbach's Alpha above 0.7 often indicates good reliability (Ceyisakar et al., 2021).

### **5.0 RESULTS**

This part presents the findings of the study which collected data from 63 respondents. The general objective was to determine the influence of employees' attitude towards implementing FMIS. However, the study was specifically conducted to determine how perceived ease of use, perceived usefulness and compatibility influence behavioural intention to use FMIS in public institutions in Tanzania.

#### ***5.1 Sex, Age, Work Experience and the Behavioural Intention to Use FMIS***

The study manipulated the demographic information due to the nature of the study to determine the characteristics of the respondents in relation to their perception of the use of technology, as those characteristics may influence decisions and consequently affect their decision (Elias & Lubua, 2021). The study incorporated three characteristics: age, sex and work experience to manipulate respondents' perception and adopting FMIS in public institutions.

From Table 3, the study reveals that 65.1% of respondents were male compared to 34.9%





female, which probably shows that a higher number of males are employed in Tanzania. This aligns with the report of the World Bank Group (2023) showing that the labour force participation rate among females is 77.1% and among males is 85.9% for 2023.

**Table 3: Demographic Variables**

Variable	Elements of Measurement	Frequency	Per cent
Sex	Female	41	65.1
	Male	22	34.9
	Total	63	100.0
Age	Below 20 years	2	3.2
	21 to 35 years	40	63.5
	36 to 50 years	14	22.2
	51 years and above	7	11.1
	Total	63	100.0
Work experience	Below four years	29	46.0
	four to ten years	20	31.7
	Above ten years	14	22.2
	Total	63	100.0

Source: Research data, 2023

The study conducted a statistical analysis using the Pearson Chi-Square test to explore the relationship between sex and employee perceptions regarding the behavioural intention to use FMIS in public organisations in Tanzania, as presented in Table 4. The results indicated no significant association between these two variables, with a p-value of 0.790, which exceeds the conventional threshold of 0.05. This finding suggests that the sex of employees does not significantly influence their decision-making processes related to the implementation of FMIS. This aligns with findings from previous studies that have similarly employed the Pearson Chi-Square test to evaluate associations between demographic variables and perceptions in various contexts, demonstrating that demographic factors do not always correlate with attitudes or behaviours in organisational settings (Benhamou & Melot, 2018; Dalamitros, 2023).

Moreover, the study utilised the One-Way ANOVA test to assess the relationship between age, work experience, and behavioural intention to use FMIS as presented in Table 4. The results



revealed no significant associations among these demographic variables, as evidenced by p-values greater than 0.05. This suggests that the characteristics of respondents, including age and work experience, are independent of their perceptions regarding the implementation of FMIS in public organisations in Tanzania. This finding is consistent with other research that has examined similar demographic variables and their impact on technology adoption and organisational behaviour, indicating that factors such as age and experience may not significantly influence perceptions in all contexts (Atiq, 2023; Košičiarová et al., 2021).

The results for insignificant associations in the tests align with various studies about attitudes towards tech-based interventions, where demographic characteristics generally do not reliably predict user responses. For example, a number of studies that have found demographic variables to matter but the influence of these factors can often be superseded by other explanations such as organisational culture and individual motivations (Chen et al. 2021; Liang et al., 2022). The results of this study provide insight into how demographic variables may influence employee perceptions in the FMIS context and offer indications that organisation should also give attention to other factors beyond demographics if they wish employees accept the system effectively. Besides, the use of statistical tests such as Pearson's Chi-Square and One-Way ANOVA in this paper points to requirement for sound methodological understanding when testing relationship between categorical variables.

These tests have been widely documented in the literature as key and can be used by researchers to determine independence among groups, isolation variation from one group to another (Turhan, 2020; Osemene et al., 2020). Altogether, the findings of these analyses offer important implications for policymakers and organisational leaders in Tanzania that go beyond demographic characteristics but include strategies to address factors underlying employee perceptions and behaviours towards FMIS specifically. In addition, the implications of this discovery are relevant not only in a short-term FMIS adoption context within Tanzania. This points to a broader understanding of these factors — the contingent role played by organisations and individuals that shapes how employees in public service feel about and act on behalf of agencies. This is consistent with modern literature discussions that encourage looking at technology adoption more holistically and focus on the interactions between individual, organisational, and contextual dimensions (Ji et al., 2020).

**Table 4: *Categorical Information on Demographic Characteristics and Behavioural***



### *Intention to Use FMIS*

<b>Independent Variable</b>	<b>Dependent Variable</b>	<b>Analytical Model</b>	<b>p-value</b>
Sex	Behavioural Intention to Use FMIS	Chi-Square	0.341
Age	Behavioural Intention to Use FMIS	One Way ANOVA	.145
Work experience	Behavioural Intention to Use FMIS	One Way ANOVA	.783

Source: Author's source (2023)

### *5.2 The Influence of Perceived Ease of Use, Usefulness and Compatibility on Behavioural Intention to Use Technology*

Based on section 2.0, this study determined the extent to which perceived ease of use, usefulness and compatibility influence behavioural intention to use FMIS. The study adopted an ordinal regression analytical model to assess the strength of this relationship.

The study tested whether the three predictor variables (perceived ease of use, usefulness, and compatibility) could predict employees' behavioural intention to implement FMIS in public organisations in Tanzania since the variable output was on the Likert scale. The results suggest that the predictor variables appropriately predict employees' behavioural intention towards implementing the FMIS in Tanzania, in which the observed model fitting p-value was 0.000, less than the threshold ( $p < 0.05$ ), as summarised in Table 5.

**Table 5: Model Fitting Information**

<b><i>Predictor variables</i></b>	<b><i>Dependent variable</i></b>	<b><i>p-value</i></b>
Perceived ease of use, perceived usefulness, compatibility	Behavioural Intention to Use FMIS	0.000

Source: Research data, 2023

Referring to Table 6, the Goodness-of-fit test was observed to verify the use of predictor variables, in which the significance value (p-value) was 0.00, showing that the predictor variables were fit to be used to determine the dependent variables. This suggests that the selected predictors are well-suited for determining the dependent variable, which is consistent with the findings of Yang et al. (2021), who also reported a strong model fit when examining the factors influencing e-wallet adoption, where perceived usefulness and ease of use were pivotal.



**Table 6: Goodness-of-fit test**

<i>Predictor variables</i>	<i>Dependent variable</i>	<i>p-value</i>
Perceived ease of use, perceived usefulness, compatibility	Behavioural Intention to Use FMIS	0.000

Source: Research data, 2023

As presented in Table 7, the study observed 0.71 of Nagelkerke pseudo-R-square ( $R^2$ ), which was applied to confirm the variability of the outcome to determine the model fit. The value for  $R^2$  was higher, indicating a better model fit. Hence, predictor variables fit with the behavioural intention to use FMIS in Tanzania.

**Table 7: Nagelkerke pseudo-R-square**

<i>Predictor variables</i>	<i>Dependent variable</i>	<i>p-value</i>
Perceived ease of use, perceived usefulness, compatibility	Behavioural Intention to Use FMIS	0.51

Source: Research data, 2023

### ***Significance of the Influence of Perceived Ease of Use, Usefulness and Compatibility on Behavioural Intention to Use Technology***

The first part of this section provided overall information on the influence of perceived ease, usefulness, and compatibility on the behavioural intention to implement FMIS in public institutions. Perceived ease of use, usefulness, and compatibility determine the behavioural intention to implement FMIS in public institutions.

Nevertheless, it was important to determine the significant contribution of each of the three variables in this relationship. Therefore, the study responded to the hypotheses in section 3.0 and presented the parameter estimates in Table 8.

In the first hypothesis, the study determined how perceived ease of use (PEOU) influences behavioural intention (BI) to implement FMIS in public institutions. The obtained p-value of 0.000, below the conventional threshold of 0.05, attests to the statistical significance of the relationship between PEOU and BI in implementing FMIS, which provides clear evidence that there is a meaningful association. The results align with other studies (Alfani et al., 2023; Al-



Haddad et al., 2023; Sobti, 2019), which confirmed the significant relationship between PEOU and BI. Hence, the study found evidence to suggest that the PEOU affect the behavioural intention to implement FMIS among employees in public institutions in Tanzania. Therefore, public institutions must consider software user interface and technical support before integrating financial and accounting systems to improve how well the software can operate within specific environments, including hardware and other software.

In the second hypothesis, the study determined how perceived usefulness (PU) influences behavioural intention (BI) to implement FMIS in public institutions. The obtained p-value of 0.000 confirms the statistical significance of the relationship between PU and BI in implementing FMIS, which means there is a significant relationship between PU and BI, as found in other studies (To & Trinh, 2021; Zhao & Liu, 2019). Hence, the study stresses that the PU affects the BI to implement FMIS in public institutions in Tanzania. Therefore, public institutions must consider business requirements before purchasing financial and accounting systems to improve how well the software helps users to accomplish their specific goals and tasks.

In the third hypothesis, the study determined how the compatibility of the system influences behavioural intention (BI) to implement FMIS in public institutions. The obtained p-value of 0.000, below the conventional threshold of 0.05, certifies the statistical significance of the relationship between compatibility and BI in implementing FMIS. This shows that there is a significant relationship between PEOU and BI, as confirmed by other studies (Giri & Manohar, 2021; Putra et al., 2022). Hence, the study found evidence to suggest that the PEOU affects the behavioural intention to implement FMIS among employees in public institutions in Tanzania. Therefore, public institutions must consider software compatibility before integrating financial and accounting systems to improve how well the software can operate within specific environments, including hardware and other software.

**Table 8: *The Summary of Parameter Estimates***

<b>Predictor Variables</b>	<b>Dependent Variable</b>	<b>p-value</b>
Perceived Ease of Use	Behavioural Intention to Use FMIS	0.000
Perceived Usefulness	Behavioural Intention to Use FMIS	0.000
Compatibility	Behavioural Intention to Use FMIS	0.000

Source: Author's data (2023)



## 6.0 CONCLUSION AND RECOMMENDATION

This study determined the influence of employees' attitudes towards the implementation of Financial Management Information Systems (FMIS) in public institutions in Tanzania. The study confirmed that employees' attitudes contribute negatively or positively to implementing information systems. Specifically, the study adopted the perceived ease of use, usefulness, and compatibility towards the implementation of Financial Management Information Systems in public institutions in Tanzania. The study confirms that implementation of the Financial Management Information Systems implementation of FMIS depends on attitudes of employees towards the use of the accounting systems.

The study suggests that public institutions need to change employees' attitudes through strategies that can improve the ease of use, usefulness and compatibility of the accounting systems. Public institutions must strategise to transform employees' attitudes towards using information systems. The institutions should aim for total participation of employees in system user requirements, clear communication during implementation, hands-on training, and genuine support from system developers. Also, the government must ensure all employees who are the main users of these systems understand the benefits of these accounting systems in daily operations.

Moreover, while the DTPB framework is a strong behavioural theory, further research may benefit from integration with other theories, frameworks, and quantitative models to provide a better understanding of the factors influencing FMIS implementation. Future research should also explore the role of organisational culture and leadership in shaping employees' attitudes and behavioural intentions to use technology. Nevertheless, the integration of advanced quantitative methodologies, such as Machine Learning (ML), Multilevel Modelling (MLM), and Structural Equation Modelling (SEM), can enhance the depth and breadth of this study to allow more fine insights into employees' attitudes towards behavioural intention to use technology.

## REFERENCES

Ahmed, A., Mohammed, C., Ahmad, A., & Abdulrazzaq, M. (2023). Design and implementation of a responsive web-based system for controlling the financial budget of universities. *Joti*, 5(1), 1-7. <https://doi.org/10.37802/joti.v5i1.339>



- Ajzen, I. (1991). The theory of planned behavior. *Organisational Behavior and Human Decision Processes*, 50(2), 179-211. doi:10.1016/0749-5978(91)90020-T
- Al-Qahtani, N., Al-Yafi, K., & Alshare, K. (2019). Factors influencing employees' intention to apply ergonomics at workplaces: a cultural perspective. *International Journal of Human Factors and Ergonomics*, 6(1), 57. <https://doi.org/10.1504/ijhfe.2019.10021008>
- Apol, K., Lydersen, L., Mortensen, Ó., Weihe, P., Steig, B., Andorsdóttir, G., ... & Gregersen, N. (2021). Fargen – participants in the genetic research infrastructure of the faroe islands. *Scandinavian Journal of Public Health*, 50(7), 980-987. <https://doi.org/10.1177/14034948211046817>
- Atiq, S. (2023). The impact of working conditions, leadership, and job satisfaction on job performance: a case study of private and public schools. *Pakistan Journal of International Affairs*, 6(3). <https://doi.org/10.52337/pjia.v6i3.905>
- Ay, M. (2023). User acceptance of online examination system using the unified theory of acceptance and use of technology (utaut) model. *Letters in Information Technology Education (Lite)*, 6(1), 30. <https://doi.org/10.17977/um010v6i12023p30-37>
- Azalan, N., Mokhtar, M., & Karim, A. (2022). Modelling e-zakat acceptance among malaysian: an application of utaut model during covid19 pandemic. *International Journal of Academic Research in Business and Social Sciences*, 12(12). <https://doi.org/10.6007/ijarbss/v12-i12/15958>
- Azevedo, R., Lino, A., Aquino, A., & Machado-Martins, T. (2020). Financial management information systems and accounting policies retention in brazil. *International Journal of Public Sector Management*, 33(2/3), 207-227. <https://doi.org/10.1108/ijpsm-01-2019-0027>
- Aziz, M., Harun, S., Baharom, M., & Kamaruddin, N. (2020). Preferred learning styles for digital native and digital immigrant visitors in the malaysian music museum. *Asian Journal of University Education*, 16(3), 234. <https://doi.org/10.24191/ajue.v16i3.11085>
- Bashir, A. and Bastola, D. (2018). Perspectives of nurses toward telehealth efficacy and quality of health care: pilot study. *Jmir Medical Informatics*, 6(2), e35. <https://doi.org/10.2196/medinform.9080>
- Benhamou, E. and Melot, V. (2018). Seven proofs of the pearson chi-squared independence test and its graphical interpretation. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3239829>
- Brusca, I., Villegas, M., & Montesinos, V. (2016). Public financial management reforms: the role of ipsas in latin-america. *Public Administration and Development*, 36(1), 51-64.



<https://doi.org/10.1002/pad.1747>

- Bujang, M. (2021). A step-by-step process on sample size determination for medical research. *Malaysian Journal of Medical Sciences*, 28(2), 15-27. <https://doi.org/10.21315/mjms2021.28.2.2>
- Ceyisakar, I., Leeuwen, N., Dippel, D., & Lingsma, H. (2021). Ordinal outcome analysis improves the detection of between-hospital differences in outcome. *BMC Medical Research Methodology*, 21(1). <https://doi.org/10.1186/s12874-020-01185-7>
- Chang, M., Kuo, F., Lin, T., Li, C., & Lee, T. (2021). The intention and influence factors of nurses' participation in telenursing. *Informatics*, 8(2), 35. <https://doi.org/10.3390/informatics8020035>
- Chen, Y., Hao, S., & Li, A. (2021). Do governmental, technological and organisational factors influence the performance of financial management systems?. *Kybernetes*, 51(3), 1127-1150. <https://doi.org/10.1108/k-11-2020-0808>
- Curtis, A. (2023). Sample size planning in quantitative nursing research. *Ajn American Journal of Nursing*, 123(11), 42-46. <https://doi.org/10.1097/01.naj.0000995360.84994.3b>
- Dalamitros, A. (2023). Swimming coaches' professional development and training practices: an international survey. *Frontiers in Sports and Active Living*, 5. <https://doi.org/10.3389/fspor.2023.1229066>
- Diamond, J. and Khemani, P. (2006). Introducing financial management information systems in developing countries. *Oecd Journal on Budgeting*, 5(3), 97-132. <https://doi.org/10.1787/budget-v5-art20-en>
- Elias, J. D. & Lubua, E. W. (2021). The impact of usability, functionality and reliability on users' satisfaction during library system adoption. *The Journal of Informatics*, 1(1). <https://doi.org/10.59645/tji.v1i1.13>
- Eljack, N. (2023). Sudanese efl ph.d. students' attitudes and perceptions towards using zoom during the covid-19 pandemic. *Journal of Language Teaching and Research*, 14(6), 1458-1468. <https://doi.org/10.17507/jltr.1406.03>
- Elsaman, A. (2022). Modern financial tools' impact on public financial management: the case of egypt. *Finance Theory and Practice*, 26(6), 175-191. <https://doi.org/10.26794/2587-5671-2022-26-6-175-191>
- Essay, A., Schenkelberg, M., Seggern, M., Rosen, M., Schlechter, C., Rosenkranz, R. & Dzewaltowski, D. (2023). A protocol for a local community monitoring and feedback system for physical activity in organised group settings for children. *Journal of Physical Activity and Health*, 20(5), 385-393. <https://doi.org/10.1123/jpah.2022-0486>





- Fernando, D. (2021). An analysis of moodle acceptance for students in smpk2 penabur using unified theory of acceptance and use of technology model. *Acmit Proceedings*, 6(1), 16-23. <https://doi.org/10.33555/acmit.v6i1.90>
- Gentil, M., Cuggia, M., Fiquet, L., Hagenbourger, C., Berre, T., Banâtre, A., ... & Chapron, A. (2017). Factors influencing the development of primary care data collection projects from electronic health records: a systematic review of the literature. *BMC Medical Informatics and Decision Making*, 17(1). <https://doi.org/10.1186/s12911-017-0538-x>
- Giovanis, A., Athanasopoulou, P., Assimakopoulos, C., & Sarmaniotis, C. (2019). Adoption of mobile banking services. *The International Journal of Bank Marketing*, 37(5), 1165-1189. <https://doi.org/10.1108/ijbm-08-2018-0200>
- Giovanis, A., Tsoukatos, E., & Vrontis, D. (2020). Customers' intentions to adopt proximity m-payment services: empirical evidence from greece. *Global Business and Economics Review*, 22(1/2), 3. <https://doi.org/10.1504/gber.2020.10026676>
- Giri, G. and Manohar, H. (2021). Factors influencing the acceptance of private and public blockchain-based collaboration among supply chain practitioners: a parallel mediation model. *Supply Chain Management an International Journal*, 28(1), 1-24. <https://doi.org/10.1108/scm-02-2021-0057>
- Girwar, S., Jabroer, R., Fiocco, M., Sutch, S., Numans, M., & Bruijnzeels, M. (2021). A systematic review of risk stratification tools internationally used in primary care settings. *Health Science Reports*, 4(3). <https://doi.org/10.1002/hsr2.329>
- Gunawan, F., Sari, I., & Yanfi, Y. (2019). The consumer intention to use digital membership cards. *Journal of Business & Retail Management Research*, 13(04). <https://doi.org/10.24052/jbrmr/v13is04/art-10>
- Gürkan, G. and Kahraman, S. (2022). Trends of the last 20 years of postgraduate theses in the field of science education related to biotechnological concepts in turkey: a content analysis. *Bartın University Journal of Faculty of Education*, 11(2), 307-327. <https://doi.org/10.14686/buefad.938293>
- Gwara, S., Wale, E., & Odindo, A. (2022). Behavioral intentions of rural farmers to recycle human excreta in agriculture. *Scientific Reports*, 12(1). <https://doi.org/10.1038/s41598-022-09917-z>
- Hansen, J., Saridakis, G., & Benson, V. (2018). Risk, trust, and the interaction of perceived ease of use and behavioral control in predicting consumers' use of social media for transactions. *Computers in Human Behavior*, 80, 197-206. <https://doi.org/10.1016/j.chb.2017.11.010>



- Hewlett, L. and Werbeloff, M. (2022). Preparing public management students for mixed methods research. *Teaching Public Administration*, 41(3), 367-388. <https://doi.org/10.1177/01447394221110339>
- Ji, X., Gu, W., Qian, X., Wei, H., & Zhang, C. (2020). Combined neyman–pearson chi-square: an improved approximation to the poisson-likelihood chi-square. *Nuclear Instruments and Methods in Physics Research Section a Accelerators Spectrometers Detectors and Associated Equipment*, 961, 163677. <https://doi.org/10.1016/j.nima.2020.163677>
- Khasawneh, M. and Irshaidat, R. (2017). Empirical validation of the decomposed theory of planned behaviour model within the mobile banking adoption context. *International Journal of Electronic Marketing and Retailing*, 8(1), 58. <https://doi.org/10.1504/ijemr.2017.083553>
- Košičiarová, I., Kádeková, Z., & Štarchoň, P. (2021). Leadership and motivation as important aspects of the international company’s corporate culture. *Sustainability*, 13(7), 3916. <https://doi.org/10.3390/su13073916>
- Liang, J., He, P., & Yang, J. (2022). Testing multivariate normality based on t-representative points. *Axioms*, 11(11), 587. <https://doi.org/10.3390/axioms11110587>
- Limerick, A. (2023). Assessing rfmis implementation using delone and mclean model: enhancing regional financial management. *LawEco*, 17(1), 43-55. <https://doi.org/10.35335/laweco.v17i1.41>
- Mahmud, D. (2023). The influence of hedonic motivation, influencer marketing on purchase decision with fomo (fear of missing out) as mediation. *International Journal of Professional Business Review*, 8(11), e03834. <https://doi.org/10.26668/businessreview/2023.v8i11.3834>
- Maria, V. (2023). Perceived usefulness, perceived ease of use, perceived enjoyment on behavioral intention to use through trust. *Indonesian Journal of Multidisciplinary Science*, 3(1), 1-7. <https://doi.org/10.55324/ijoms.v3i1.702>
- Maula, M. and Stam, W. (2019). Enhancing rigor in quantitative entrepreneurship research. *Entrepreneurship Theory and Practice*, 44(6), 1059-1090. <https://doi.org/10.1177/1042258719891388>
- Meiza, A. (2023). The ordinal regression to analyse radical intention of muslim indonesian students through personality type and tolerance approach. *Pakistan Journal of Statistics and Operation Research*, 359-368. <https://doi.org/10.18187/pjsor.v19i2.3932>
- Mohajan, H. (2020). Quantitative research: a successful investigation in natural and social sciences. *Journal of Economic Development Environment and People*, 9(4).



- <https://doi.org/10.26458/jedep.v9i4.679>
- Muharsih, L. (2023). Conformity and positive emotions as predictors of impulsive buying tendencies of online shopping consumer. *EPB*, 1(1), 1-8. <https://doi.org/10.59805/epb.v1i1.33>
- Mwaijande, F. (2024). Potential of social protection policy interventions for breaking poverty cycle in tanzania. *Journal of Social and Policy Issues*, 34-39. <https://doi.org/10.58835/jspi.v4i1.306>
- NAOT. (2021). Annual General Report of the Controller and Auditor General on the Audit of Information Systems for the year ended 30<sup>th</sup> June 2020. [https://www.nao.go.tz/uploads/Annual\\_General\\_Report\\_on\\_Information\\_Systems\\_2019\\_20.pdf](https://www.nao.go.tz/uploads/Annual_General_Report_on_Information_Systems_2019_20.pdf)
- NAOT. (2023). Annual General Report of the Controller and Auditor General on the Audit of Public Authorities and other Bodies for the Financial Year 2021/22. [https://www.nao.go.tz/uploads/Annual\\_General\\_Report\\_for\\_Audit\\_of\\_Public\\_Authorities\\_FY\\_2021-22.pdf](https://www.nao.go.tz/uploads/Annual_General_Report_for_Audit_of_Public_Authorities_FY_2021-22.pdf)
- NAOT. (2024). Annual General Report of the Controller and Auditor General on the Audit of Central Government for the Financial Year 2022/23. [https://www.nao.go.tz/uploads/Annual\\_General\\_Report\\_on\\_Audit\\_of\\_Central\\_Government\\_FY\\_2022-23.pdf](https://www.nao.go.tz/uploads/Annual_General_Report_on_Audit_of_Central_Government_FY_2022-23.pdf)
- Natawibawa, I., Irianto, G., & Roekhudin, R. (2018). Self-efficacy and controllability as whistleblowing intention predictors of financial managers in educational institutions. *Jurnal Tata Kelola Dan Akuntabilitas Keuangan Negara*, 147-165. <https://doi.org/10.28986/jtaken.v4i2.213>
- Nielsen, S., Buchbinder, R., Pearce, C., Lubman, D., Lalic, S., Haas, R., ... & Xia, T. (2023). Cohort profile: using primary care data to understand opioid prescribing, policy impacts and clinical outcomes (oppico) in victoria, australia.. *BMJ Open*, 13(5), e067746. <https://doi.org/10.1136/bmjopen-2022-067746>
- Nyein, K., Caylor, J., Duong, N., Fry, T., & Wildman, J. (2020). Beyond positivism: toward a pluralistic approach to studying “real” teams. *Organisational Psychology Review*, 10(2), 87-112. <https://doi.org/10.1177/2041386620915593>
- Ooi, E. (2024). Factors influencing the intention to use the icd-11 among medical record officers (mros) and assistant medical record officers (amros) in ministry of health, malaysia. *Scientific Reports*, 14(1). <https://doi.org/10.1038/s41598-024-60439-2>
- Osemene, K., Ihekoronye, M., & Lamikanra, A. (2020). Knowledge, attitudes, perceptions and practices of community pharmacists about generic medicine in nigeria. *Journal of Generic Medicines the Business Journal for the Generic Medicines Sector*, 17(2), 84-96. <https://doi.org/10.1177/1741134320962843>



- Park, H., Park, J., Lee, H., & Kim, S. (2018). Public acceptance of a health information exchange in korea. *Healthcare Informatics Research*, 24(4), 359. <https://doi.org/10.4258/hir.2018.24.4.359>
- Pasape, L. and Godson, E. (2022). Challenges affecting effective implementation of financial management information systems in local government authorities in tanzania as part of the digital ecosystem. *Journal of Financial Risk Management*, 11(03), 522-548. <https://doi.org/10.4236/jfrm.2022.113025>
- Pérez, J. and Vélez-Jaramillo, J. (2021). Understanding knowledge hiding under technological turbulence caused by artificial intelligence and robotics. *Journal of Knowledge Management*, 26(6), 1476-1491. <https://doi.org/10.1108/jkm-01-2021-0058>
- Puah, S., Khalid, M., Looi, C., & Khor, E. (2021). Investigating working adults' intentions to participate in microlearning using the decomposed theory of planned behaviour. *British Journal of Educational Technology*, 53(2), 367-390. <https://doi.org/10.1111/bjet.13170>
- Putra, B., Subekti, I., & Atmini, S. (2022). Examining the factors influencing indonesia's local government' intentions to use financial management information systems: the case for an extended tam. *International Journal of Research in Business and Social Science* (2147-4478), 11(10), 217-230. <https://doi.org/10.20525/ijrbs.v11i10.2241>
- Raninda, R., Wisnalmawati, W., & Oetomo, H. (2022). Effect of perceived usefulness, perceived ease of use, perceived security, and cashback promotion on behavioral intention to the dana e-wallet. *Jurnal Ilmiah Manajemen Kesatuan*, 10(1), 63-72. <https://doi.org/10.37641/jimkes.v10i1.1218>
- Saha, S., Zhuang, G., & Li, S. (2020). Will consumers pay more for efficient delivery? an empirical study of what affects e-customers' satisfaction and willingness to pay on online shopping in bangladesh. *Sustainability*, 12(3), 1121. <https://doi.org/10.3390/su12031121>
- Sahli, A. and Legohérel, P. (2014). Using the decomposed theory of planned behavior (dtpb) to explain the intention to book tourism products online. *International Journal of Online Marketing*, 4(1), 1-10. <https://doi.org/10.4018/ijom.2014010101>
- Samel-Kowalik, P., Tomaszewska, A., & Samoliński, B. (2019). Survey participations rates reporting – toward standardisation in epidemiological studies. *Przegląd Epidemiologiczny*, 73(3), 383-391. <https://doi.org/10.32394/pe.73.31>
- Self, W., Semler, M., Leither, L., Casey, J., Angus, D., Brower, R., ... & Brown, S. (2020). Effect of hydroxychloroquine on clinical status at 14 days in hospitalised patients with covid-19. *Jama*, 324(21), 2165. <https://doi.org/10.1001/jama.2020.22240>
- Simpson, S., Tetteh, L., & Agyenim-Boateng, C. (2020). Exploring the socio-cultural factors



- in the implementation of public financial management information system in ghana. *Journal of Accounting & Organizational Change*, 16(3), 349-368. <https://doi.org/10.1108/jaoc-10-2018-0100>
- Sobti, N. (2019). Impact of demonetisation on diffusion of mobile payment service in india. *Journal of Advances in Management Research*, 16(4), 472-497. <https://doi.org/10.1108/jamr-09-2018-0086>
- Soon, A., Derashid, C., & Bidin, Z. (2020). Dtpb as a better voluntary tax compliance predictor - a comparison study. *Journal of Business Management and Accounting*, 10(Number 2), 31-56. <https://doi.org/10.32890/jbma2020.10.2.3>
- Taylor, S., & Todd, P. (1995). Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption intentions. *International Journal of Research in Marketing*, 12(2), 137-155. doi:10.1016/0167-8116(94)00019-K
- Tiwasing, P., Galloway, L., Refai, D., Kevill, A., Kromidha, E., & Pattinson, S. (2023). The international journal of entrepreneurship and innovation editors' series: advancing quantitative research in entrepreneurship. *The International Journal of Entrepreneurship and Innovation*, 24(1), 3-6. <https://doi.org/10.1177/14657503221148571>
- To, A. and Trinh, T. (2021). Understanding behavioral intention to use mobile wallets in vietnam: extending the tam model with trust and enjoyment. *Cogent Business & Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1891661>
- Tsai, K., Chou, T., Kittikowit, S., Hongsuchon, T., Lin, Y., & Chen, S. (2022). Extending theory of planned behavior to understand service-oriented organisational citizen behavior. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.839688>
- Turhan, N. (2020). Karl pearsons chi-square tests. *Educational Research and Reviews*, 15(9), 575-580. <https://doi.org/10.5897/err2019.3817>
- Tutz, G. (2021). Ordinal regression: a review and a taxonomy of models. *Wiley Interdisciplinary Reviews Computational Statistics*, 14(2). <https://doi.org/10.1002/wics.1545>
- Uña, G. (2019). How to Design a Financial Management Information System: A Modular Approach. *IMF How to Notes*, 2019(003), 1. <https://doi.org/10.5089/9781498311120.061>
- Wang, H., Quintana, F., Lu, Y., Mohebujjaman, M., & Kamronnahr, K. (2022). How are BMI, nutrition, and physical exercise related? an application of ordinal logistic regression. *Life*, 12(12), 2098. <https://doi.org/10.3390/life12122098>
- Wielicka-Gańczarczyk, K. and Jonek-Kowalska, I. (2023). Perceptions and attitudes toward risks of city administration employees in the context of smart city management. *Smart*



- Cities, 6(3), 1325-1344. <https://doi.org/10.3390/smartcities6030064>
- World Bank Group. (2023). World Bank Group. Gender Data Portal. <https://genderdata.worldbank.org/en/economies/tanzania>. Accessed on 19<sup>th</sup> October 2024.
- Yamane, Y. (1967). Mathematical Formulae for Sample Size Determination.
- Yang, M., Mamun, A., Mohiuddin, M., Nawari, N., & Zainol, N. (2021). Cashless transactions: a study on intention and adoption of e-wallets. Sustainability, 13(2), 831. <https://doi.org/10.3390/su13020831>
- Ye, T., Xue, J., He, M., Gu, J., Lin, Z., Bin, X., ... & Cheng, Y. (2019). Psychosocial factors affecting artificial intelligence adoption in health care in china: cross-sectional study. Journal of Medical Internet Research, 21(10), e14316. <https://doi.org/10.2196/14316>
- Yeoh, W. (2023). To study the contribution of price factor towards the purchase intention of ev market in malaysia among generation y consumers. Journal of Technology Innovations and Energy, 2(1), 49-54. <https://doi.org/10.56556/jtie.v2i1.458>
- Zhao, L. and Liu, B. (2019). Trust-related factors affecting citizens' adoption of e-government based on tam model. Destech Transactions on Social Science Education and Human Science, (eiem). <https://doi.org/10.12783/dtssehs/eiem2018/26969>