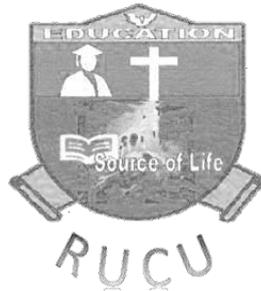


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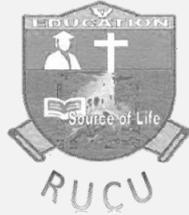
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## **Editorial Note**

Dear authors and readers of the Ruaha Business, Economics and Management Sciences Journal. It is with great pleasure that I welcome you to the fourth volume of Ruaha Journal of Business, Economics, and Management Sciences for which I have been appointed as the Chief Editor

Our goal is to provide worldwide scholars with comparative research papers on recent business, economics, and management sciences advancements in Tanzania and elsewhere. This journal is the brainchild of the Faculty of Business and Management Sciences and is intended to bridge the gap between the business, economics, and management academic tradition and the international arena. Our goal is also to improve access by other scholars and ensure the journal gains global recognition.

Second, we are very flexible in our editorial policies and thus welcome articles from other countries. It is our vision that the Ruaha Journal of Business, Economics, and Management Sciences transitions to a platform of international comparative discussions on various business, economics, and management sciences themes. Our scope is limitless and thus accommodates a wide range of interdisciplinary fields.

Finally, I would like to thank all prominent members of our Editorial Board for joining us in this new fascinating, and promising academic project. I thank all contributors to our journal.

Prof. Dominicus Kasilo

**Chief Editor**

## TABLE OF CONTENTS

### **Monetary Staff Motivation, Agency Roles and The Performance of Arusha Road KKKT Savings and Credits Society**

*Godfrey Jacob Japhet and Joseph Magali*.....page 4

### **The influence of Demographic Characteristics on Xenocentric Tendencies of Tanzanian Consumers toward Purchasing Anti-malarial remedies**

*Blandina Kisawike*.....page 19

### **Assessment of the Determinants of Employee Retention in Tanzania’s Police Force: A Case of Iringa Municipality**

*Emmanuel R. Bilal and Venance Ndalichako*.....page 38

### **Assessment of Factors Influencing Behavioral Intention to Adopt the Mobile Phone Billing System: A Case of Public Sector Clients in Tanzania**

*Chris Omboga Onyonka, and Alberto Ndekwa*.....page 64

### **Examination of the Influence of Employee Behavior Intention on Electronic Government System Adoption in Tanzania: A Case of Traffic Management System (TMS) Iringa Municipality Police Force**

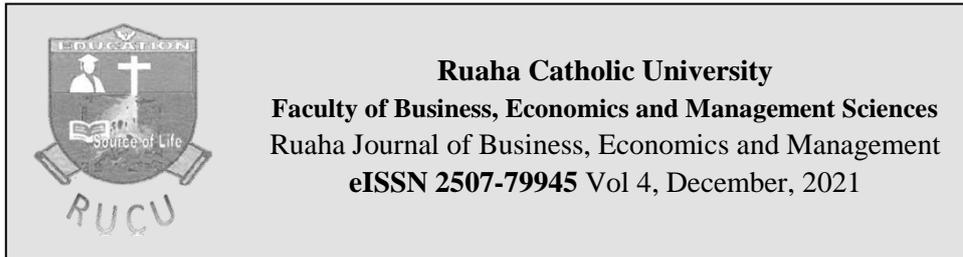
*Shanina Simbano and Isidore Minani*.....page 85

### **Effects of Human Resources Practices on Employees Performance in Tanzania. A case of Iringa Urban Water Supply and Sanitation Authority (IRUWASA)**

*Silver Nyato, Alex Juma Ochumbo and Alberto Ndekwa*.....page 107

### **Determinants of Mobile Banking Usage in Tanzania: A Case of CRDB Bank Customers in Iringa Municipality**

*Singwa Mwenemilao and Theobald Kipilimba*.....page 119



## **Monetary Staff Motivation, Agency Roles and The Performance of Arusha Road KKKT Savings and Credits Society**

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### **Abstract**

*The impact of monetary motivation on the execution of agency responsibilities and, ultimately, the performance of the Arusha Road KKKT Savings and Credit Cooperative Societies (SACCOS) in Dodoma City, Tanzania, was investigated in this research. The information from the two board members and four SACCOS workers was gathered using the in-depth interview data collection tool. Data was analyzed using manual content analysis. As revealed, the SACCOS employed competitive salaries, allowances, bonuses, and subsidized loans to motivate its employees. It was further revealed that monetary incentives had motivated SACCOS workers to fulfil their responsibilities without having to deal with the agency's concerns of conflict of interest, risk aversion, and personal gain by concealing SACCOS information. The study recommends that employees' motivating policies and strategies be properly formulated and implemented to intensify SACCOS' performance.*

**Keywords: Staff motivation, Agency roles, the performance of SACCOS, Tanzania**

### **1. Introduction**

Motivation is the process of inducing an increase in human effort in order to achieve organizational goals (Lambrou, et al., 2010). As a result, the primary goal of motivation is to aid in the achievement of organizational objectives. Motivation is usually associated with improved job performance, which can be assessed in terms of increased productivity, profitability, or task completion (Ndege, 2015). When a desire to complete a task arises from an internal purpose, it is referred to as intrinsic motivation, and when it arises from external pressure, it is referred to as external motivation (Nwankwo et al., 2018). According to Stello (2012), monetary incentives are those that involve monetary payment, unlike non-monetary motivations. Salary, earnings, and various types of allowances such as accommodation,

transportation, extra duty, and shift allowances are all examples of monetary motivation. Career achievement, recognition, personal growth, influence, and responsibility are elements of non-monetary motivation. The terms financial and monetary motivation were used interchangeably in this study.

Various scholars (Troisi and Nese, 2012; Ibrahim and Brobbey, 2015; Liliane and Lydia, 2020 and Felicien and Irechukwu, 2021) assessed the influence of monetary motivation on the performance of SACCOS and other related microfinance institutions (MFIs) such as credits unions. However, these studies did not explore the influence of competitive salaries, staff allowances, annual incentives, and subsidized loans on SACCOS performance. Furthermore, the investigations found a link between monetary motivation and agency roles. According to the literature, the majority of studies on the influence of monetary and non-monetary motivation on performance have been conducted in commercial banks rather than semi-formal financial organizations like SACCOS (Sarpong, 2016; Benyela, 2018; Khan et al., 2018; Laury, 2019). However, because commercial banks have ample capital and structured procedures, the authors believe they are unable to portray the actual conditions in SACCOS. SACCOS mobilize savings and provide borrowing opportunities to members (Absanto & Aikaruwa, 2013). They also serve the majority of the rural and urban dwellers who are excluded from formal financial services (Nigusie, 2015). SACCOS are globally termed as credit unions (Donal et al., 2015). Therefore, the terms SACCOS and credit unions are synonymously used in this study.

Tanzania Cooperatives Development Commission (TCDC) has registered a total of 5,918 cooperatives in 2020. TCDC further reports that in 2020 the Minister responsible for cooperatives deregistered 2,554 SACCOS, owing to being non-functional or untraceable. Magumula and Ndiege (2019) reported corruption, fraud cases and misuse of SACCOS' funds in Tanzania, a situation that reflected the existence of agency problems and the low integrity of SACCOS' leaders.

Akten et al. (2019) argued that the challenges of credits union in Ghana included; managerial problems, competition from other financial service providers, poor by-laws enforcement, loans default and poor loans recovery methods. The challenges portrayed the existence of agency problems and lack of staff motivation (Muithya & Ombati, 2019). SACCOS or credits unions in developed countries reported fewer problems related to agency roles and staff motivation. For instance, Donal et al., (2015) uncovered the demands of the regulatory framework, capital inadequacy, the decline of members, and imbalance between economic and social objectives as the major challenges that restrained credit unions globally. *Kanisa la Kiinjili la Kilutheri Tanzania (KKKT)* or Evangelical Lutheran Church in Tanzania (ELCT) Arusha road SACCOS was established in February 2004 and bears the registration number DOR 619. The SACCOS was established to promote the economic welfare of church congregants. The SACCOS initially had 89 members (37 males, 51 females) and 1 group and kicked off with a capital of Tanzanian Shillings (TZS) 1,701,320 (USD 738.8). However, as of February 2020, the SACCOS had 612 members (280 males, 310 females and 22 groups), a capital base of TZS, 616,049,724 (USD 267,522.03), shares TZS 463,110,000 (USD 201,107.35), savings TZS 188,503,324 (USD 81,858.31) and deposits TZS 917,150,000 (USD 398,276.01). In May 2020, the SACCOS issued cumulative loans of 12 billion TZS

(USD 5,199,126.55) and had registered an after-tax profit of TZS 26,328,172 (USD 11,406.96) and TZS 56,594,919 (USD 24,520.35) in 2017 and 2018 respectively. The SACCOS is among the 60 licensed SACCOS in Tanzania and operates without requiring external capital. The SACCOS was branded as the best in the Dodoma region and one of the best performing SACCOS in Tanzania (Arusha KKKT SACCOS, 2020; TCDC, 2020).

Dodoma City and region had a total of 20 and 47 SACCOS respectively (TCDC, 2020). The sources of income for the people living in the city were agriculture, animal husbandry, petty businesses such as wholesale and retail shops, carpentry, food vendors, small and medium industries, consultancy, construction, industrial, craft and forests works, tourism, hotels, and permanent and wage employment (URT, 2020). A complete shift of Tanzania's capital from Dar es Salaam to Dodoma led to an increase in business activities in the City and hence compelled the Arusha KKKT SACCOS to expand its services as well. Arusha KKKT SACCOS was purposely selected for the study owing to its outstanding performance in the Dodoma region. As a result, the authors were enthused to link the SACCOS' performance to monetary motivation and how personnel execute agency responsibilities.

Magali (2014) revealed that 46% of the rural SACCOS in the Dodoma and Morogoro regions were non-sustainable. The majority of employees in these SACCOS were not paid monthly salaries although they received allowances. However, no study was conducted to ascertain how monetary motivations influenced the SACCOS' performance in Tanzania.

Belghitar and Clark (2015) found that higher managers' cash compensation provides the opportunity for risk diversification and reduces agency costs. Similarly, Mukameneza and Emuron (2020) revealed that the payment of financial incentives to employees greatly increased the profitability of Umwalimu SACCO in Rwanda. However, only salary increase was considered in the analysis and other forms of financial motivations such as allowances, incentives and subsidized loans were beyond the scope of the study.

Nyaga (2017) confirmed that the growth of Kenyan SACCOS was attributed largely to staff's morale and motivation. Wanjihia (2016) found that only 8.7%, 2.9% and 2.8% of the employees of Kenya Bankers SACCO Society (KBSS) were satisfied with salary, annual bonus and compensation package respectively, signifying that most of the employee dissatisfaction with monetary motivations. Houensou and Senou (2019) found that MFIs productivity in Benin largely relied on the provision of non-financial in comparison to financial incentives. The authors suggested that financial incentives should be distributed based on the MFIs' overall performance. They did admit, however, that financial incentives hampered outreach. Furthermore, their research focused on bonuses rather than other financial-based incentives like allowances and subsidized loans.

Most microfinance organizations, according to De Leeuw (2017), employed financial incentives to motivate their personnel and promote improved performance. Employees were motivated by financial incentives to fulfill their agency roles efficiently and avoid conflicts of interest and asymmetric information flow (Panda & Leepsa, 2017). Despite the fact that the types of motivators were not specified, Iqbal et al. (2013) stated that motivation determined the level of commitment for banking employees in Pakistan, and Akhter (2018) stated that

employee motivation influenced more than 22% of the performance of financial institutions in Bangladesh.

## **2.2 The Literature Review**

### **2.2.1 Agency theory and SACCOS performance**

Jensen and Meckling proposed the agency theory in 1976 and articulated that conflict of interests might arise when managers run firms on shareholders' behalf. This occurs because the managers' and shareholders' interests are to maximize incentives and wealth, respectively (Bratton, 2012). According to Eisenhardt (1989), when shareholders trust the management to run the company, they relinquish direct control and so allow the agency problem to flourish. The prevalence of conflict of interest, asymmetric information flow, and risk aversion among managers are thus the factors of the agency theory.

The firm's viability is jeopardized by poor handling of the agency problems. Because of the conflict of interest, the management violates the company's rules and bylaws for personal advantage. The asymmetric information flow permits the firm's manager to keep information hidden that could improve the organization's success. Furthermore, risk aversion prevents the organization from earning revenue or profit as a result of the manager's decision to accept calculated risks. Many scholars, according to Perrow (1986), have focused on the problems caused by the agents rather than the principals.

The firm's viability is jeopardized by poor handling of agency problems. Because of the conflict of interest, the management violates the company's rules and bylaws for their own personal gain. The asymmetric information flow permits the firm's manager to retain information that could improve organizational success. Furthermore, risk aversion prevents the organization from earning revenue or profit as a result of the manager's decision to accept calculated risks. Many scholars, according to Perrow (1986), have focused on the problems caused by the agents rather than the principals.

Several scholars (Huang et al., 2016 ; Mwangi et al., 2015 ; Melkamu, 2016 ; Omwenga, 2017, and Muhanguzi, 2019) used the agency theory to analyze the influence of corporate governance practices on the financial performance of SACCOS in Kenya however, they did not analyze the link between good governance variables and the agency theory. Although Kumburu et al. (2012) assessed the link between the agency theory and SACCOS performance in Kilimanjaro region, they however did not examine how the variables of the agency theory influenced borrowing of loans from external sources and SACCOS' performance.

According to Omollo and Ronga (2016), SACCOS in Kenya adhered to the agency theory because members elected board members and employees to run the SACCOS. However, the relationship between the variables of the agency theory and compliance were beyond the scope of the study. According to Olando et al. (2013), stewardship and agency responsibilities were critical for the growth of SACCOS in Kenya. Nonetheless, the study made no mention of how the factors of the agency hypothesis aided SACCOS expansion.

Despite the fact that no analysis was conducted to support the claim, Nkuru (2015) claimed that agency theory was associated with incentive, interest, and risk. The problem of conflict of interest between agents and the principle in SACCOS, according to Kenani and Bett (2018), is generated by the separation of ownership and control. The amount to which these variables influenced SACCOS' performance, however, was not investigated. We looked at how financial motivation affects the employees' agency role and performance at Arusha KKKT Arusha road SACCOS in this study.

### **2.2.2 The role of Monetary and non-monetary motivation on the performance of banks and microfinance institutions (MFIs)**

Troisi and Nese (2012) avowed that the Italian credits union workers failed to balance their job satisfaction and shareholders' profit maximization motive. The study revealed that the workers' motivation was lower when the maximization of the profit was prioritized. The study recommended a balance between employee's motivation and profit maximization.

Because of inadequate human resource management abilities, most credit unions in Cameroon did not have a staff incentive plan, according to Benyela (2018). The financial motive and performance of Rwandan Umwalimu SACCOS in terms of profitability and liquidity correlation were recognized by Liliane and Lydia (2020). Promotion, recognition, wage increment, and training were the variables examined in the study. However, the study only looked at the monetary motivation component of salary, ignoring the factors of staff allowances, annual incentives, and subsidized loans. Similarly, Felicien and Irechukwu (2021) discovered a link between employee satisfaction, security, and training and the performance of Umwalimu SACCOS. Again, the study did not examine the impact of monetary motivation on SACCOS' performance in depth. The factors under investigation were also not linked to the agency theory.

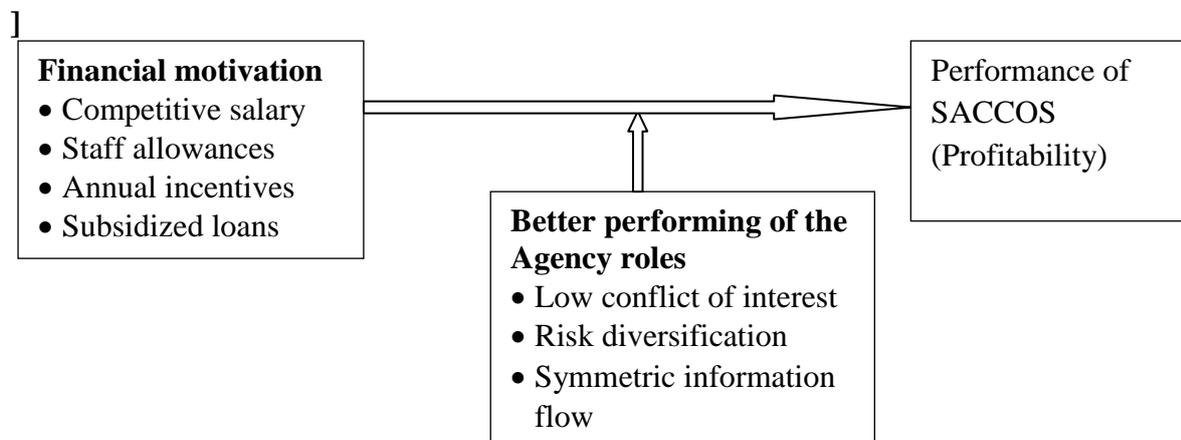
The majority of studies on the impact of monetary and non-monetary motivation on performance were conducted in the banking sector. According to Sarpong (2016), attractive salary, automobile and housing loans, promotion, and fringe benefits motivated 86.7 percent of Eco bank employees in Ghana. Commercial banks, on the other hand, are financially sound and formalized financial institutions that cannot be compared to SACCOS, which are semi-formal MFIs with limited capital. The study did not look into how financial motivation and the role of the bank's staff influenced the bank's performance. According to Nduru (2012), financial motivation was a driver for improving staff performance at the ATGT Ghanaian commercial bank. Employee motivation, according to Ibrahim and Brobbey (2015), improved efficiency, increased individual goal achievement, increased overall satisfaction, and strengthened bonds among financial institution employees in Ghana. Laury (2019) concurred that recognition, remuneration advantages, and other financial awards had a favourable impact on the performance of Mlimani City CRDB bank employees. Despite this, the influence of agency roles on bank's performance in Tanzania was beyond the scope of the study.

Ruth (2013) revealed that centenary banks in Uganda used bonuses payment, fringe benefits provision, cultivating a sense of responsibility, equal treatment and promotion as employees' motivators. Nevertheless, the author found that employee involvement in decision-making processes, remuneration, training, and employees' rotation were significantly lacking. Khan et al. (2018) explored the link between performance and Pakistan banking employee's motivation and motivational variables included; knowledge integration, experience recognition and training. However, the influence of financial motivation on bank performance was beyond the study's scope.

### 2.2.3 The conceptual framework

The conceptual framework in Figure 2.1 indicates that the financial motivations consisted of an attractive salary, staff allowances and subsidized loans. Competitive salary encouraged the employee to work hard because income was sufficient to meet basic needs. The competitive salary was complemented by staff allowances which included extra duty, communication and emergence financial assistance and annual incentives (Stello, 2012). Moreover, subsidized loans led to increased SACCOS' staff motivation and overall performance (Belghitar & Clark, 2015; Mukaminega & Emuron, 2020). This means that they were free from performing duties that conflicted with their interests and were able to manage and diversify risks for the benefit of the SACCOS. Therefore, financial motivations and better implementation of the agency roles promoted the performance of SACCOS in terms of profitability.

**Figure 2.1: The Conceptual Framework**



### 3. Methodology

This study used an in-depth interview technique to obtain data that informed this study. The chairman of the board, chairperson of the credit committee, manager, one cashier and one guard participated were interviewed. The management committee which comprises of 7 members and 2 members were considered for an interview. Moreover, 4 SACCOS' staff were selected for participation in the interviewee from the list of 12 staff and the composition of the population is as shown on Table 3.1 below. The members recruited represented the category of responders who had sufficient knowledge about the SACCOS. The qualitative data was collected using a checklist and the researchers conducted a saturation test and determined that the number of respondents was sufficient for obtaining the required data

(Fofana et al., 2020). Data were analyzed using manual content analysis. The information gathered was divided into three themes: types of financial motivation offered by SACCOS, variables of the agency theory that influence staff motivation, and SACCOS performance statistics. Because the number of respondents was small, a manual contents analysis was used. As a result, the amount of data gathered was not enormous (Kasperuniene, et al., 2020).

**Table 3.1: Population and sample distribution**

<b>Category</b>	<b>Total numbers</b>	<b>Gender</b>	<b>Interviewed number</b>
<b>Management committee</b>	<b>7</b>	2 females, 5 males	2 (1 male, 1 female)
<b>Manager</b>	1	1 male	1
<b>Cashiers</b>	3	Females	1
<b>Watchman</b>	4	Males	1
<b>Attendants</b>	1	Female	1

## **4. Results and Discussion**

### **4.1 Forms of monetary motivation**

The respondents reported receiving competitive salaries, allowances, incentives and subsidized loans as forms of monetary motivations. The study assessed the link between monetary motivation and the performance of Arusha road KKKT SACCOS.

#### **4.1.1 Salary**

Basic salary which meets the monthly staff expenditure is vital for employee motivation (Liliane & Lydia, 2020). An attractive wage encourages employees to focus on their work rather than on how they may supplement their income to cover basic expenses. Inadequate pay, on the other hand, makes employees disgruntled. As a result, paying a suitable salary to an employee boosts job performance (Nagaraju & Pooja, 2017). The manager of the Arusha Road KKKT SACCOS responded that the employees were contented with their pay. "We are satisfied with our income because the SACCOS provide us a minimum wage of over 400,000 TZS for lower cadre employees and over one million TZS for managers." We are motivated by this amount of pay." Furthermore, the SACCOS provides us with an annual wage increase based on the profitability of the SACCOS each year. In 2019, for example, each employee received a 10% yearly wage increase.

SACCOS employees were also motivated by their jobs, according to the chairman of the SACCOS, because they were paid a salary that was higher than the government's suggested basic salary." *We offer our employees a greater compensation than the government recommends, which keeps them motivated all the time.*" Sarpong (2016) similarly found that attractive salaries motivated Eco bank employees in Ghana. Furthermore, Liliane and Lydia (2020) concluded that employee salary increment promoted the performance of Umwalimu

SACCOS in Rwanda. Magali (2014) revealed that the motivation of some rural SACCOS' staff in Morogoro, Kilimanjaro and Dodoma regions in Tanzania was low owing to low salaries, while others were not paid at all and catalyzed the poor performance of the SACCOS, especially in Morogoro and Dodoma regions.

#### **4.1.2 Allowances**

The amount of money awarded to a member of staff who has completed a specific assignment is known as an allowance. The sum is sometimes paid on a regular basis to enable the payee to meet specific demands or expenses (Parsa, 2017). As a result, allowance payment is critical since it not only covers budgeted expenses but also allows employees to use the remaining funds to meet their fundamental necessities before receiving their monthly income. Leaders and employees of the SACCOS confirmed that they were granted various allowances by the SACCOS. According to the chairman of the SACCOS, *"At the end of each month, we pay all staff loan appraisal allowances. Extra duty allowances, meeting allowances, and training attendance allowances are also paid. Allowance payments have promoted employee retention in our SACCOS"*.

The manager of the SACCOS stated, "I can fulfill my fundamental necessities because I am satisfied with my employment and numerous payments." This is why I've been with SACCOS for over ten years." "We are paid a monthly communication allowance ranging from 5,000 to 50,000 TZS based on the staff's job responsibilities and seniority," the manager continued. " Furthermore, in the event of the death of a SACCOS employee or a blood relation, the SACCOS provides us a contribution of 1 million and 500,000 TZS, respectively. There is also an emergency fund set aside to address social concerns, with employees receiving TZS 200,000 in the event of childbirth or wedding ceremony. *The SACCOS further contributes half of the health insurance and social security scheme charges which is equivalent to 3% and 10% of our salaries respectively*". In Indonesia, Astiti et al. (2018) discovered that professional allowances increased teachers' motivation and job performance positively, but that hardship allowance had no effect on student-teacher performance in Gambia.

#### **4.1.3 Staff Incentives**

The chairman of the SACCOS stated, *"At the conclusion of each year, after calculating the earnings in two ways, we provide incentives to the employees. To begin with, we pay them dividends from their loans in the same way as we do for other SACCOS members. Second, as an incentive, we pay the SACCOS employees an amount determined by the board. In 2019, for example, each employee received a TZS 200,000 incentive and 250,000 TZS honoraria."* *"We pay personnel sitting allowances when they attend meetings, seminars, and workshops," the SACCOS chairman added. " The housing allowance, is however not paid to employees; rather, it is included in the total monthly income. Furthermore, while there is no transportation allowance, there is a facility for official duties."* Houensou and Senou (2019) revealed that non-financial incentives improved the performance of MFIs. However, no detailed analysis was carried out to depict how financial incentives influenced MFIs'

performance. The fringe benefits and bonuses payment also motivated the Eco and centenary bank employees in Ghana and Uganda respectively (Sarpong, 2016; Ruth, 2013).

### **3.1.4 Staff subsidized loans**

Subsidized loans to employees enhanced their incentive by lowering their loan interest rates. The administration of the Arusha Road KKKT SACCOS indicated that its employees will be given subsidized loans. The chairman of the SACCOS responded. *"Instead of the 15% offered to other borrowers, we have given our employees a 10% plot loan interest rate." The loans for plots ranged from TZS 3 to TZS 9 million. As a result, our employees paid a lower price for the plot than other SACCOS members.* According to Sarpong (2016), Eco bank workers in Ghana were motivated with vehicle and house loans. Employees were additionally motivated by the issuing of off-the-book (OTB) or informal loans, according to Hunt and Hayward (2018), because it helped them solve their unanticipated financial challenges. The purpose of issuing OTB loans was to retain qualified employees and loyal customers.

## **4.2 The relationship between Agency role and staff financial motivation**

The study further explored how financial motivation boosted SACCOS employees' performance while avoiding issues like conflict of interest, risk aversion, and asymmetric information flow and as revealed by one attendant; *"We are encouraged to work even longer than the specified work schedule because we have a sense of belonging to the SACCOS, of course, we benefit from the SACCOS by receiving annual dividends, salaries, and allowances."* *"We do not hesitate in taking risks that may improve the SACCOS' performance,"* the manager added.

The chairman of the SACCOS revealed that; *"There is no risk in trusting our employees, and financial motivation is one of the risk mitigation measures. We allow staff to attend various seminars and compensate them for their attendance."* The attractive reward scheme for the manager, according to Boshkoska (2014), can be employed as one of the ways to mitigate agency problems. Paying a manager, a share of the profit earned could motivate them to work hard. Financial motivations, according to Besley and Ghatak (2014), promote the execution of agent roles and lower the extent of conflict of interests.

The cashier stated that *"We have a cash counting equipment that detects counterfeit notes, therefore the chance of receiving fake money is lowered." We have specified the permissible faults in counting money; otherwise, we are liable for paying the deficits. However, because we are very dedicated to our work, this does not always transpire. When a loss occurs, however, we accept responsibility and reimburse the lost amount. We are willing to take the risk because the financial gain we receive from the SACCOS outweighs the predicted loss."* In regard to agency risk reduction, the manager shared; *"We are very vigilant in loan appraisal and we make sure that every borrower fulfils all loans conditions. We issue loans to borrowers three times their deposits* (Interview field data, Dodoma May 2020). Francis-Sandy (2016) also found that the credits union in the Caribbean did not face agency challenges because of common bonds.

The chairman of the SACCOS also shared that, *“Members have assigned leadership to the management committee and employees. The management committee is in charge of overseeing policies, rules, and daily operations. There are three types of committees: supervision, board, and loan. Under the direction of the chairman of the Board or a Board member on duty, the manager is the secretary of the Board and is responsible for carrying out SACCOS internal managerial functions. Three yearly general meetings are held, during which members discuss and deliberate on various matters. The lending committee approves all loans except emergence loans, which are approved by the board member on duty and the SACCOS manager. There has never been a situation where the manager and a board member on duty granted loans in a way that violates by-laws. We trust our staff and treat them like family. They work hard to achieve the SACCOS' objectives because we financially motivate them.”* Boshkoska (2014) asserted that internal control plays a vital role in reducing the agency problem.

According to the information provided by the SACCOS chairperson, employees worked hard because they were trusted and motivated, which prohibited them from engaging in activities that were not in their best interests. The evidence also indicated that the SACCOS was managed using an agency method. The agency method allowed the SACCOS to entrust the operation of the SACCOS to its board of directors and employees on behalf of its shareholders. Because the elected board members were able to run the SACCOS, the operation of the SACCOS was streamlined. The study's findings confirmed that the board members and SACCOS personnel carried out their duties thoroughly and professionally, resulting in the SACCOS's good performance.

Concerning information flow, the manager shared that; *“The chairman of the board, manager, other board members, and SACCOS' personnel have an excellent flow of information.”* When necessary, information is provided orally and via cell phone. The head of the SACCOS is in charge of formal communication, such as signing official documents and contracts”. The manager further adds that; *“There have been no instances where we have withheld information for personal gain, and I do not believe that there is any reason for withholding information because we believe that transparency is a cornerstone of SACCOS' performance.”* Furthermore, this is not conceivable because while the SACCOS chairman is absent, the board member on duty manages the organization. Furthermore, while we are fully benefited by the SACCOS, we do not see the rationale of withholding information for personal advantage.”

According to the conclusions of the respondents, information flow was symmetrical, and there were no instances where employees withheld information for personal gain. The level of employee motivation and the availability of a proper information flow mechanism within the SACCOS, however, cultivated this. Effective information benefits the firm and stakeholders, according to Omar and Rahman (2019). Because a smooth flow of information not only improves a company's transparency, but it also aids in business monitoring.

## **5. Conclusion**

The results of the in-depth interview revealed that there was a link between financial motivation and SACCOS workers' adoption of agency tasks. Financial motivations encouraged SACCOS personnel to work without having to deal with agency difficulties such as conflict of interest, risk aversion, and withholding SACCOS information for personal gain, according to the findings. The research also found that SACCOS employees worked hard since they were compensated with a salary, allowances, bonuses, and loan interest that was subsidized.

## **6. Recommendations**

SACCOS employees in Tanzania should be motivated to enhance their performance, according to current study findings. Policymakers should create policies that encourage SACCOS workers to be more motivated. This will help to alleviate the agency difficulty while also boosting SACCOS performance. SACCOS' financial motive, implementation of agency responsibilities, and performance are all linked in this study, which adds to the agency theory. Previous research has related the agency theory to formal financial institutions but hasn't looked into how the variables of agency roles are linked to financial incentives and SACCOS performance, as was the case in the current study. The findings of this study show that semi-formal institutions like SACCOS can lessen or prevent agency difficulties by prioritizing employee motivation. However, because the research is qualitative, it is limited in its ability to test theories. As a result, mixed design studies are suggested for future research.

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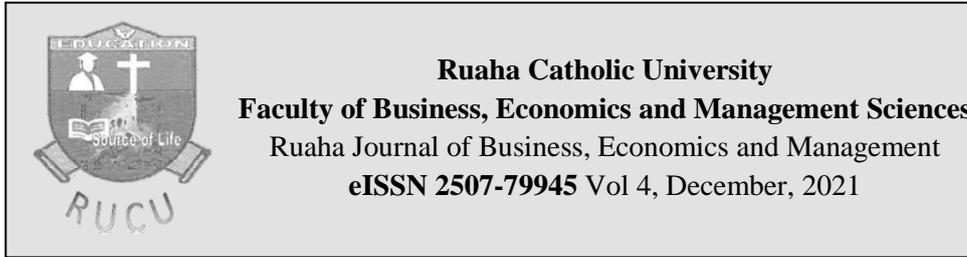
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## **The influence of Demographic Characteristics on Xenocentric Tendencies of Tanzanian Consumers toward Purchasing Anti-malarial remedies**

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### **Abstract**

*The aim of this study was to explore the influence of demographic characteristics on xenocentric tendencies of Tanzanian consumers towards purchasing anti-malarial remedies. An exploratory research design was adopted which fostered the discovery of ideas and insights underlying consumers' evaluation of anti-malarial remedies in reference to xenocentrism. Purposive sampling was used to select 11 participants who informed this study. It was revealed that the xenocentric tendencies of Tanzanian consumers toward purchasing anti-malarial remedies were influenced by demographic variables such as age, education and geographical location. For instance; older consumers residing in rural areas and possessing limited education were less xenocentric towards purchasing anti-malaria remedies in comparison to their younger, more educated counterparts from urban areas. The findings of this study will provide health professional bodies with valuable insights on xenocentric tendencies of Tanzanian consumers towards purchasing anti-malarial remedies. This, in the long run will boost the standard of various domestic medical products and hence encourage Tanzanians to value domestically produced anti-malarial remedies and other products.*

**Keywords:** Xenocentrism; Anti-malarial remedies; Consumer Behaviour;

Demographic Characteristics

### **1. Introduction**

Global consumer behaviour is an intricate phenomenon however, globalization, has improved the trade of services and goods across national borders. As a result, there is improved global access to various products from a wider range of sources than ever before. Xenocentrism has emerged as a key concept in understanding consumer behaviour in relation to both domestic and foreign products on a global scale (Camacho, 2020). Companies have improved their segmentation process by paying particular attention to the cultural elements associated with their clients as a result of the requirement to understand consumer behaviour in certain target areas. The international marketing discipline has taken a keen interest in explaining customer

behavior discrepancies. In reality, beyond globalization, one of the most difficult tasks for marketing experts is to enter the minds of consumers and comprehend their purchasing behavior (Arenas-Gaitán et al., 2019). New trends in color, packaging, raw materials, and environmental protection, among other things, have influenced customers' perceptions of quality, durability, and benefits, according to existing literature. Other aspects, such as social, individual, time, financial resources, and attitude, have also influenced consumption decisions (Camacho,2020). Despite the aforementioned benefits, and the overall influence of globalization in several production sectors, it still appears that the effects of globalization are negligible in other categories. As a result, research focusing on the construction of perspectives toward the purchase of domestic and foreign commodities is relevant, and scholars have expressed interest in the topic (Chabowski et al.,2013 and Schuiling et al.,2004 as cited by Camacho,2020). Internal bias can play a crucial effect in purchasing behaviour, according to various research on the preference for home products (Gineikiene et al., 2017). Consumers in various countries, however, have developed a preference for imported goods, regardless of quality, accessibility, guarantees, or price and as evidenced in both developing and developed countries (Balabanis a Diamantopoulos, 2016; Zhou and Hui, 2003). Furthermore, even when there is strong antipathy against a country, the preference for foreign products over local products is not limited to a single product category (Batra et al., 2000). Exploring the evolution of attitudes about buying native and foreign products is a crucial topic in this context. The current study, in particular, explores consumer patterns through the lens of xenocentrism. Despite being documented throughout the social sciences discipline in a number of national settings (Kent and Burnight, 1951; Wallach, 2002), the study of xenocentrism remains under-researched and incoherent, and a similar pattern prevails in existing marketing literature. Although consumer ethnocentrism has received substantial attention from scholars and practitioners in international marketing, it is still necessary to explain how preferences for foreign over domestic products prevail. The purpose of this study is to fill a gap in the literature on consumer xenocentrism by investigating the impact of demographic variables on Tanzanian consumers' xenocentric tendencies toward purchasing anti-malarial remedies.

## **1.1 Research Objectives**

### **1.1.1 General Objective**

The main objective of this study was to explore the influence of demographic characteristics on xenocentric tendencies of Tanzanian consumers toward purchasing the anti-malarial remedies.

### **1.1.2 Specific Objectives**

- i) To explore the influence of age on xenocentric tendencies to Tanzanian consumers towards purchasing anti-malarial remedies.
- ii) To explore the influence of education on xenocentric tendencies to Tanzanian consumers towards purchasing anti-malarial remedies.
- ii) To explore the influence of geographical location on xenocentric tendencies to Tanzanian consumers towards purchasing anti-malarial remedies.

### **1.1.2 Research Questions**

- i) Does age have an influence on xenocentric tendencies to Tanzanian consumers towards purchasing anti-malarial remedies?
  
- ii) Does education have an influence on xenocentric tendencies to Tanzanian consumers towards purchasing anti-malarial remedies?
  
- iii) Does geographical location have an influence on xenocentric tendencies to Tanzanian consumers towards purchasing anti-malarial remedies?

## **2. Literature Review**

### **2.1 Consumer Behaviour**

Schiffman and Kanuk (2007:3) defined consumer behaviour as the “behaviour that consumers display in searching for, purchasing, using, evaluating, and disposing of products and services to satisfy their needs”. In this study, consumer behaviour is defined as actions that consumers take in seeking malaria medication after realizing their abnormal health condition in relation to their xenocentric tendencies. When customers are ready to purchase a product or use a service to meet their needs, the research of how people behave based on the country of origin image of the product that they consume begins. This is the point at which customers must make a series of decisions. These differ depending on the goods and the buying situation, and they determine this behaviour. Consumer behaviour is a function of several factors, as outlined by different authors and according to Bakshi (2012), it is influenced by; cultural, social (reference groups, family, social and role status), personal (gender, age, occupation, income, and lifestyle) and psychological factors (motivation, perception, beliefs and attitude). Blackwell *et al.* (2006) found that individual (demographic, consumer knowledge, perception, learning, motivation, personality, beliefs, attitude and lifestyle) and environmental variables (culture, social class, reference groups, family and household) mainly influenced consumer behaviour. Sata (2013) explored the factors affecting consumer buying behaviour of mobile devices, and found that price, mobile phone features, social influence, durability of the mobile phone, brand name, and after sales services were the major factors influencing consumers’ purchasing behaviour of mobile phones. It was further revealed that the nature of the product or service equally influences customers’ purchasing decisions of a particular product/service.

### **2.2 Consumer Xenocentrism**

Consumer xenocentrism (CX) was characterized by Kent and Burnight (1951) as a person's predilection for a society other than their own, as well as a proclivity to rank and scale everything in comparison to it rather than their own. CX offers an alternative way of examining and understanding foreign product bias (Kent and Burnight, 1951). Even if domestic products are of higher quality than foreign products, CX appears to favor foreign products over domestic products in the sphere of consumer behavior (Mueller et al., 2009). In the context of consumer behavior, social identity refers to any category label with which an

individual associate himself/herself in order to achieve a positive self-image by emphasizing similarities with a desirable reference group and contrasting differences with other reference groups that are thought to be hazardous (Camacho, 2020). This social category of the consumer is represented at the level of national identity through ethnocentrism, cosmopolitanism, and xenocentrism (Prince et al., 2016). In particular, xenocentrism was developed and discussed in sociology literature and was initially considered as counterpart to the ethnocentrism concept that describes people who prefer societies different from their own and evaluate everything with the foreign society as reference (Kent and Burnight, 1951).

According to (Belk, 1988), a xenocentric person is someone who expresses a preeminent aversion for a nation's government strategies and political activities. Ethnocentric propensities are unavoidable in all social orders, and Kent and Burnight (1951) contend that among social orders that have contact with unique gatherings, certain people are inclined to display emotions which are somewhat contrary to ethnocentrism. Such xenocentrics are focused on a remote gathering and may even have a robust aversion for their sort. Intangibility is a fundamental piece of the emotions of ethnocentrism and xenocentrism. An ethnocentric individual perceives ethics where it is not present. On the other hand, an individual who expresses xenocentric behaviour perceives deficiencies where none exists. According to reference (Belk, 1988), ethnocentrism results in a predisposition toward the local, and xenocentrism results in an inclination against the household, inferring a relative predisposition for the outside. Based on previous ideas, in the context of consumption, xenocentrism refers to the inclination of consumers for goods or services from a society other than their own, a tendency to evaluate and accept foreign goods and services instead of those coming from their society (Lawrence, 2012).

In this way, consumer xenocentrism establishes the general preference of consumers for foreign products and the rejection of products from their own country (Kipnis et al., 2014). Measuring a consumer's xenocentrism is a first step to empirically study its effects. In that sense, two recent proposals must be mentioned. On the one hand, reference (Balabanis and Diamantopoulos, 2016) developed the multi-item scale (C-XENSCALE) and, based on exhaustive empirical analysis, demonstrated that this measure is capable of explaining disregard for domestic goods and preference for international items. Rojas-Méndez and Chapa (2019) structured a conceptual framework of xenocentrism where the XSCALE was developed to assess its dimensionality, reliability, and validity. Their results showed that, for consumers, xenocentrism connotes positive attitudes towards foreign cultures and negative attitudes toward their own culture, in terms of their social behaviour and their consumption preferences. The XSCALE includes two dimensions of domestic rejection and foreign admiration. The XSCALE was also tested for validity in measuring the phenomenon in developing countries.

Consumer experience has been found to have a negative impact on domestic industries, owing to customers' negative attitudes about domestically produced goods (Mueller et al., 2009). According to a survey conducted by Okechuku and Onyemah (1999), Nigerian consumers prefer to wear, drive, and use foreign products over domestic products. As a result,

domestic industries and other producers face pressure to enhance product quality, lower costs, and even alter promotional techniques. Other researchers, however, observed that customers in emerging nations prefer foreign products for other reasons. According to them, those consumers are drawn to foreign products due to underlying socio-psychological characteristics that immediately confer a status of prestige on foreign countries and, by association, their products (Howes, 1996 and Drazin, 1991). CX has been proven to be influenced by demographic features such as age, gender, income level etc and these effects are as detailed in the next sub-section.

### **2.3 Consumer Xenocentrism and Demographics Characteristics**

Demographics are quantifiable statistics of a certain population in a specific location. The term is sometimes used to refer to the study of quantifiable subgroups of a population that characterize that population at a specific point in time (Power & Elliott, 2006). Commonly examined demographics include age, race, gender, level of education, income level, disabilities, mobility, home ownership, employment status, among others (Batra *et al.*, 2000; Nam, 1998; Belk, 2000). Respondents' demographics are used as a separate set of antecedents in import purchase behavior and consumer xenocentrism studies. This provides the researcher the option of segmenting consumers based on their favourable and unfavourable attitudes toward foreign and domestic products and services. When considering consumer xenocentric behavior, customer demographic features have been proven to be critical. Several studies looked into the extent to which demographic variables can function as moderators in consumer decision-making (Batra *et al.*, 2000; Nam, 1998; Belk, 2000; Taylor *et al.*, 1987, Bullis, 1997). In terms of xenocentric attitudes toward foreign products, they looked at a range of demographic variables such as age, income disparity, and urban versus rural variations. Consumers who are financially well-off are more likely to acquire foreign products, according to Belk (2000) and James (1993). That is, when it comes to preferring foreign products, wealthier customers are more xenocentric.

Similar studies that analyzed urban and rural disparities found that urban consumers are more xenocentric in comparison to their rural based counterparts, owing to their exposure to or knowledge of foreign products. Bullis (1997), for example, observed that urban Indian customers were the first to acquire prestige-enhancing imported goods. According to a study conducted by Shultz *et al.* (1994), older and rural customers are less xenocentric because they have more traditional beliefs and behavioural patterns that are resistant to change (and, therefore, are less likely to prefer foreign products). They concluded that urban consumers have more knowledge, exposure, and access to foreign products (both economically and physically).

Demographic variables have an impact on consumer xenocentrism just as they do on consumer ethnocentrism, as can be observed. Consumers differ in their decision-making processes when choosing a product to purchase, according to the distinctive character of the person in his or her purchasing intent, according to the empirical findings presented above. Consumers in developing countries prefer imported to locally produced goods. Consumers in

emerging countries can be described as xenocentric, despite the fact that their demographic traits differ as indicated above. Few researches have been conducted in this area, indicating that this investigation was necessary.

### **3. Methodology**

This research was conducted in Tanzania's Mbeya Region, which is located in the southern part of the country. Mbeya is one of Tanzania's regions with a high rate of malaria infection. Furthermore, Mbeya attracts customers from all around Tanzania, and it benefits from its proximity to two national borders, Malawi and Zambia, which provide access to pharmaceuticals. This city was purposely considered as the ideal study area because it aided the researcher in obtaining answers to research questions and attaining stipulated research objectives.

An exploratory research design was used in this study to explore thoughts and insights on the influence of demographic features on Tanzanians' xenocentric attitudes for acquiring anti-malarial remedies. Exploratory research, according to Sekaran and Borgie (2010), are conducted to better understand the nature of the problem because relatively few studies have been conducted in such context. Exploratory research has the virtue of being adaptable to change and flexible. since the researcher used the study's flexibility to investigate ideas and insights on the influence of demographic tendencies on xenocentric inclinations of Tanzanians toward purchasing anti-malarial remedies, the researcher was able to obtain valuable responses from participants. In this study, qualitative research was used as part of an exploratory research design. The interpretivist theoretical framework was adopted in this study. The researcher acknowledged the different demographic characteristics studied and participants' subjective ways of deciding which anti-malarial remedies suited their chosen criteria, as the interpretivist paradigm seeks to understand the subjective reality of participants in a way that is meaningful to the participants themselves (Brand, 2009). The researcher used an Interpretivist paradigm, assuming that the influence of demographic characteristics on Tanzanians' xenocentric tendencies toward purchasing anti-malarial remedies is not an objective phenomenon with known properties or dimensions, necessitating a subjective approach to reasoning. The researcher was able to distinguish the various interpretations of reality from the participants after adopting the Interpretivist paradigm. Instead of using measurement, respondents in this study were treated as peers or friends, and an attempt was made to uncover hidden meanings (Proctor, 2003). considering the nature of the study, Tanzanian consumers and pharmacists were chosen as the study's target audience. The impact of demographic factors on Tanzanians' xenocentric attitudes toward anti-malarial drug purchases was investigated in this study. The participation of persons with specific knowledge and experience, such as consumers who have chosen and used anti-malaria remedies and pharmacists who stock and distribute medication, was essential to obtain in-depth information on these matters. Therefore, nonprobability sampling, specifically purposive sampling, was used in selecting the participants. Purposive sampling permits the researcher to decide which cases to choose that will be best able to answer the researcher's research questions and meet the researcher's objectives (Saunders *et al.*, 2009). This strategy

enabled the researcher to gain access to a variety of knowledge and experience relevant to different aspects of the research phenomenon in order to address the research questions and meet its objectives. Profiles of individual participants are shown in Table one. It should be noted that the participants' names listed in the table below are not the real names.

**Table 1: Participants' Profile**

<b>Name</b>	<b>Sex</b>	<b>Age</b>	<b>Education</b>	<b>Location</b>	<b>Occupation</b>
Isaac	M	50	Primary	Rural	Farmer
Amba	M	43	Diploma	Urban	Pharmacists
Alex	M	35	Primary	Urban	Taxi Driver
Anna	F	38	Masters	Urban	Accountant
Ben	M	79	Diploma	Rural	Retired Pastor
Bariki	M	33	Master	Urban	Assistant Lecturer
Frank	M	36	Master	Urban	Accountant
Neema	F	33	Master	Urban	Assistant Lecturer
Furaha	F	22	Certificate	Rural	Teacher
Jesca	F	64	Primary	Rural	Farmer
Amy	F	26	Bachelor	Urban	Public Relations Officer

The current study was informed by 11 respondents, consisting of 1 pharmacist and 10 consumers, according to the nature of the study. In-depth interviews were used to gather qualitative data. In-depth interviews, according to Collis and Hussey (2003), are effective when it is essential to comprehend the construct that the interviewee perceives as a foundation for his or her opinions and beliefs on a specific topic. If the goal of the interview is to gain a better understanding of the respondent's reality so that the researcher may alter it either independently or collaboratively, an in-depth interview is also appropriate.

In this study, the researcher used in-depth interviews to better understand the impact of demographic parameters on Tanzanians' xenocentric attitudes toward purchasing anti-malarial remedies. This method of data collection was appropriate in this study because the researcher believed that interviewing individual participants about the phenomena under investigation would aid in the collection of rich data on individual's subjective perceptions and experiences with anti-malarial remedies. An interview guide was designed based on themes identified in the literature that the researcher believed would enable the participants to provide relevant information. The purpose of the interview session was explained to the interviewees, prior to obtaining consent to voluntarily participate. The trustworthiness of the study was determined through credibility (in preference to internal validity), transferability (in preference to external validity/ generalisability), dependability (in preference to reliability) and confirmability (in preference to objectivity) as proposed by Lincoln and Guba (1985) as cited by Shenton (2004) and Kisawike (2015).

The acquired data was analyzed using the thematic data analysis technique. Thematic analysis, according to Braun and Clarke (2006), is a qualitative analytic method for identifying, analyzing, and reporting patterns (themes) within data. It organizes and describes

the data set in considerable detail. However, it frequently goes beyond this as it also interprets multiple facets of the research issue as was intended in the current study. Thematic analyses, like grounded theory and the building of cultural models, require more engagement and interpretation from the researcher, according to Namey et al (2012). Thematic studies focus on identifying and defining both implicit and explicit ideas within the data, or themes, rather than counting explicit words or phrases. Despite the fact that theme analysis approaches have been considered to neglect the reliability component in the study, thematic analysis is beneficial in capturing the complexity of meaning within a textual data set. In qualitative research, it is also the most widely utilized method of analysis (Namey et al., 2012).

The researcher utilized Braun and Clarke's guide to thematic analysis to analyze the information gathered. The following are the components or steps of the process: familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and identifying themes, and generating the report (Braun and Clarke, 2006). A theme represents some level of structured response or meaning within the data set and captures something fundamental about data in respect to the research question.

#### **4. Findings and Discussion**

Member identification with national groups strongly shapes attitudes, opinions and belief about one's self and others as well as one's behaviour, including consumer behaviour (Balabanis *et al.*, 2001). In the consumer sphere, consumer xenocentrism appears to result in a preference for foreign products even when domestic products are qualitatively and/or functionally similar or better (Mueller et al., 2009). In this study it was important to examine whether demographic characteristics served as influencing factors of consumers' xenocentrism and their purchasing decisions of anti-malarial remedies. Three demographic characteristics were studied; age, education and rural versus urban variations.

##### **4.1 Age**

Age to an extent connotes culturally defined behavioural and attitude norms (Alreck, 2000) and affects consumer self-concept and lifestyle (Henry, 2000). Age further influences the consumption of various products, media, and shopping centres and has been used by marketers to segment market style (Henry, 2000). In this study, the influence of age on the malaria medication decision making process as far consumer xenocentrism was concerned was examined. It was found that the age variable functioned as a moderating factor for consumer xenocentrism in the anti-malarial remedy purchasing process. As revealed, older consumers valued the expert opinion of doctors and pharmacists as they sought malaria medication and their purchasing intention solely depended on the same as one interviewee puts it:

*“When it comes to health-related issues, I usually trust the doctor's advice. I usually use ALU anti-malarial drugs, they were highly recommended by my doctor and the price for the medication is affordable” (Ben).*

*"When my family and I are diagnosed with malaria symptoms, we go to a neighbouring pharmacy and request anti-malarial medications. The pharma salesperson inquires about our ailments. She provides us ALU anti-malaria medications after she confirms that we have malaria." (Jesca).*

As revealed, the majority of older consumers prefer the expert opinion of health professionals when diagnosing malaria and purchasing anti-malarial medications. Their age hindered their ability to research and evaluate the options accessible to them. As a result, they opted to place their trust in medical experts in order to be certain of their treatment. Trust in opinion leaders reduced the amount of unanticipated risk.

Younger consumers were also found to be more interested in searching for information on various anti-malarial brands, and they used criteria such as country of manufacture, brand, days of dosage, price, and other criteria to evaluate the quality of anti-malarial remedies in order to lessen uncertainties associated with anti-malarial remedy consumption.

*I take a single dose of Kenyan-made Metakelfin anti-malarial medications and then resume my daily activities after a short while" (Alex).*

*"I've been using Orodar, a Kenyan anti-malarial treatment, for more than three years. The reasons for choosing this anti-malarial medicine are that it has a short course (I just take it once) and does not make me weary or give me a headache after taking it, allowing me to continue with my regular activities. I have high confidence in this drug because it is made in a country that appears to be progressing in terms of industrial growth, thus the quality of their products is high, which translates to superior performance" (Amy).*

When purchasing anti-malarial medications, it was discovered that younger customers considered a range of criteria. When reviewing anti-malarial treatments, the duration of the course, country of origin, price, and performance of certain anti-malarial remedies were all taken into account. They used the anti-malaria treatments' intrinsic and extrinsic cues before making a purchase. Their primary concern was the anti-malarial medication's quality. They opted to purchase foreign anti-malarial treatments to ensure quality because they believed imported anti-malarial remedies were of higher quality than those that are domestically produced. Consumers preferred Kenya-made pharmaceuticals as the country is relatively more developed than Tanzania, and they assumed that Kenyan anti-malarial treatments were of higher quality than those manufactured by the Tanzanian industry.

These findings revealed that older consumers are less xenocentric while purchasing anti-malarial treatments since their age restricts their ability to learn more about the various anti-malarial brands. Their contentment with suggested anti-malarial medications increased as well as their faith in opinion leaders. Furthermore, income constraints were discovered to be a barrier for senior consumers. Even if they were able to ignore opinion leaders' recommendations, they couldn't afford to buy foreign anti-malarial drugs because their prices were higher than domestically produced anti-malarial drugs. Younger consumers, on the other hand, were more xenocentric when it came to purchasing anti-malarial remedies, as they valued foreign anti-malarial remedies, believing that the technological advancement of

the chosen and trusted countries would produce anti-malarial remedies of superior quality to those produced at home.

The decision-making process for malaria medication among Tanzanian consumers was found to be influenced by age disparities. According to the data, most older consumers visited health centers for malaria diagnosis when they noticed malaria symptoms, and when the results confirmed that they had malaria parasites, they used the doctor's prescription to acquire anti-malarial medications. Also, older customers who had limited access to health-care facilities went to pharmacies to inquire for antimalarials and bought them based on the pharmacists' recommendations. Unless a patient expresses a preference, most Tanzanian doctors will prescribe ALU anti-malarial medications. As a result, older consumers were encouraged to utilize ALU anti-malarial medications, which are locally manufactured and considered as Tanzania's cheapest anti-malarial treatment. This prompted senior customers to use it because it was cost-effective for them.

The foregoing findings were in line with those of other writers, indicating that older consumers are more price-sensitive and face more severe constraints in comparison to their younger counterparts. As a result, older customers are more prone to buying low-cost products (Dhar and Hoch, 1997).

## **4.2 Education**

In terms of consumer xenocentrism, education was one of the variables investigated to determine how it influenced customers' decisions to purchase anti-malarial medications. Less educated consumers were found to buy anti-malarial medications based on a doctor's prescription or pharmacist's recommendation. Their selections were hampered by a lack of knowledge about various drugs. These consumers did not research on various anti-malarial medications; instead, they relied on the counsel of opinion leaders when making malaria treatment decisions.

*"I take ALU since my doctor advised me that it is an effective malaria therapy" (Isack).*

Their reasoning was hampered by their lack of knowledge of various anti-malarial brands; they couldn't dispute because they were unaware of any other options.

*"Some customers come to my store looking for anti-malaria medication, but when I ask which brand they prefer, they ask me to recommend a brand that is suitable for them. I base my decision on their purchasing power, and the majority of them prefer ALU (domestic anti-malarial medications) (Amba).*

Less-educated consumers were less xenocentric, as evidenced by opinion leaders who advised them to adopt domestic anti-malarial treatments due to their affordability and effectiveness. Due to a lack of understanding about various anti-malarial medicines, they were limited in their selection of anti-malarial available on the market. They also couldn't make a sound judgment, therefore they assumed that the counsel of opinion leaders was appropriate for their therapy. Highly educated consumers, on the other hand, were found to do information searches on various anti-malarial medicines and to evaluate anti-malarial

remedies based on criteria such as: country of manufacture, brand, price, dosage days, and other parameters.

*"I take Artequik, a Chinese anti-malarial medicine that is working well for me." For malaria therapy, I had tried a few different brands. Some of them were not functioning properly. I trust Chinese medicine because it is produced in one of the leading countries" (Bariki).*

Various consumers were drawn to utilize the products of some countries because of their strong reputation in the pharmaceutical industry. This was achievable because informed customers have access to information about malarial medications from other countries.

*"I've tried a variety of anti-malarial medications, but most of them have proved to be ineffective since I've been sick with malaria on a regular basis." For the time being, I'm taking Kenyan Metakelfin anti-malarial medications. The reason for this is that when I take it, it allows me to continue with my daily tasks" (Frank).*

When the previously chosen anti-malarial medications did not perform as planned, their levels of education prompted them to seek further information about anti-malarial remedies. They spent their money on other brands of anti-malarial treatments that they believed were of higher quality and hence would perform better, because most of them were working and had sufficient income.

*"I always take Artequin antimalarial medications from Switzerland. Because the drug is really strong, I take a break after using it because my joints get weak and I occasionally get a headache, but the condition returns to normal after a few hours. I still prefer the drug since it keeps me free of malaria for more than five months after I use it. I have faith in the drug because it is made in a country known worldwide for medical production, thus the quality of the product is good, performs excellently, and I am cured after using it" (Anna).*

Most educated consumers preferred foreign anti-malarial medications because of their experience with them and knowledge of how to contrast the quality of anti-malarial remedies produced in developed vs underdeveloped countries.

It is clear that the goal of purchasing anti-malarial medications is to be cured. When it came to purchasing anti-malarial medications, educated consumers were found to have a variety of options. They didn't choose a single brand; instead, they tried as many as possible in order to determine the optimum solution to their condition. The majority of them relied on foreign anti-malarial treatments, believing that they were of excellent quality and that they would cure them. Their rationale about the effectiveness of anti-malarial medicines led them to develop favourable attitudes toward foreign anti-malarial remedies.

Because educated consumers are well exposed to different brands of anti-malarial remedies, the findings above show that educated consumers are more xenocentric than less educated consumers. They also have a greater degree of reasoning in terms of the quality and effectiveness of various anti-malarial treatments than consumers with a lesser level of education. Furthermore, the majority of educated consumers are employed, while others are self-employed. As a result of their higher income level, they are less price-sensitive and often

associate quality to price. They believed that highly priced anti-malarial medications would be of higher quality compared to lower priced anti-malarial remedies. The level of education of Tanzanian consumers was found to have an impact on their decision to take malaria medicine. Consumers with low levels of education trusted opinion leaders when purchasing anti-malarial treatments, according to the research. Their faith in their doctors and pharmacists lessened their apprehension about purchasing anti-malarial medications. Consumers with a higher level of education, on the other hand, were more involved in the malaria medication decision-making process. They were able to determine the quality of anti-malarial treatments because of their exposure and reasoning abilities. Their education enabled them to distinguish between developed and developing countries, and the implications for quality evaluations. They looked for information on the various anti-malarial remedies and evaluated them based on criteria such as country of manufacture, price, brand, days of dosage, and side effects. The majority of highly educated consumers purchased imported anti-malarial medications, assuming that they were of higher quality than domestic anti-malarial treatments.

Hoch (1996) discovered that well-educated customers have more conviction in their evaluative abilities and are more knowledgeable about the relative quality of domestic versus foreign brands. These customers are less price-sensitive and have less budgetary restraints. They are also more quality conscious. All of these attributes influenced their preference for foreign products.

### **4.3 Geographical Location**

Individuals' purchasing behavior has been proven to be influenced by their geographic location. The purchasing decisions of rural and urban consumers, for instance, are distinctive. The decision-making process for malaria medication among rural and urban consumers was found to be influenced by their environments in this study. Limited understanding of different anti-malarial products, as well as limited sources of revenue, influenced rural consumers' purchasing decisions. As a result, consumers depended on opinion leaders when making decisions about malaria treatment.

*"When my family and I are diagnosed with malaria symptoms, we go to a neighbouring pharmacy and request anti-malarial medications. The pharma salesperson inquires about our ailments. She provides us ALU anti-malaria medications after she confirms that we have malaria" (Isack).*

Most rural consumers utilized domestic anti-malarial treatments because ALU anti-malarial remedies, which cost Tshs.2, 000/=, were affordable to most consumers. Another consideration for rural customers was accessibility.

*"I was taking Metakelfin anti-malarial drugs from Kenya, but since I moved to this village, I've been using ALU because it's the only malaria treatment medicine accessible in the drug stores." (Furaha).*

Because most consumers in rural regions cannot afford imported anti-malarial medications, local pharmacies only stock domestic anti-malarial prescription drugs, which are in high

demand. As a result, even customers who previously used foreign anti-malarial medications are compelled to purchase ALU local anti-malarial medications. Urban consumers' purchasing behavior, on the other hand, has been proven to be impacted by the environment as a result of interactions with people from various locations and cultures. The majority of urban consumers in this survey preferred foreign anti-malarial treatments owing to accessibility and financial ability.

"I take Artequin from Switzerland for anti-malarial treatment, but my children use ALU." (Neema).

Consumers in urban areas were involved in a variety of activities that helped them generate income, and therefore had access to medications that they required.

In terms of consumer xenocentrism, the findings above suggest that disparities between urban and rural areas have an impact on customers' decision-making processes. In contrast to rural consumers, urban consumers were impacted by exposure to foreign anti-malaria treatments and the broad range of choices/alternatives available in pharmacies when purchasing anti-malarial remedies. One of the risk-reduction measures discovered was product knowledge. The findings on product knowledge and its impact on the malaria drug decision-making process will be presented in the following section. Geographical differences among Tanzanian consumers were found to have an impact on the decision-making process for malaria medicine. According to the data, rural customers had difficulty accessing health center services, and the majority of them purchased anti-malarial medications from local pharmacies. When acquiring anti-malarial medications, a few consumers who were able to attend health centers for malaria diagnosis used doctor's prescriptions. After recognizing the symptoms of malaria, the majority of consumers went to pharmacies to inquire about anti-malarial medications, and the pharmacist advised them on which anti-malarial medications to buy. The anti-malarial brands accessible in most rural pharmacies were found to be limited, as the level of income of rural customers prompted pharmacists to supply only domestic anti-malarial treatments, which were affordable to the majority of rural consumers.

Urban customers, on the other hand, were found to have access to health centers due to the existence of both private and public health facilities. They had a wide variety of anti-malarial medications due to the availability of pharmacies with several anti-malarial brands. Most consumers in urban areas were able to participate in a variety of income-generating activities, therefore their standard of living was influenced by their environment. When consumers went to pharmacies to access anti-malarial treatments, the pharmacist asked them the brand of anti-malarial remedy they required, especially if they didn't have a doctor's prescription. This increased the variety of anti-malarial medicines available, and some urban consumers were interested in purchasing antimalarials from other countries.

In terms of consumer xenocentrism, the findings above suggest that variations between urban and rural areas have an impact on consumers' malaria drug decision-making processes. In contrast to rural consumers, urban consumers were impacted by exposure to foreign anti-malaria treatments and the large range of choices/alternatives available in pharmacies when

purchasing anti-malarial remedies. These findings are in line with those of other researchers who have discovered the impact of demographic variables on consumers' xenocentric tendencies. Because urban consumers are exposed to or have knowledge of foreign items, they are more xenocentric than rural customers. Bullis (1997), for instance, found that urban Indian customers prefer foreign over home products and that purchasing foreign products was considered prestigious. Rural consumers are less xenocentric, according to Shultz et al. (1994), since they have more traditional values and patterns of behavior that are very resistant to change. As a result, they choose native over foreign products. In their research, metropolitan consumers were highly exposed to, aware of international products, and had the financial means to purchase them.

Consumer xenocentrism, in general, has been demonstrated to have a negative impact on domestic industries, as customers develop a negative view about homemade goods (Mueller et al., 2009). According to a survey conducted by Okechuku and Onyemah (1999), Nigerian consumers prefer international products over domestic products. This was also the case in the current study, implying that domestic industries and other producers will be pressed to enhance product quality and even alter their marketing techniques. Other researchers, on the other hand, proposed reasons for consumers in emerging markets to prefer foreign products; they claimed that consumers in developing countries are drawn to foreign products due to underlying socio-psychological factors that automatically confer a status of prestige on foreign countries and, by extension, their products (Howes, 1998 and Drazin, 1991). This explanation was less supported by this study, which found that practical rather than psychological factors influenced participants' preferences. However, no study has yet looked into the relationship between consumer xenocentrism and educational attainment. This study's findings can be utilized by other researchers who are interested in this field.

Based on these findings, the Tanzanian pharmaceutical sector should gain better understanding of the Tanzanian malaria drug decision-making process and the factors that influence the same. For instance, the effects of stereotyping on Tanzanian consumers' perceptions of indigenous anti-malarial medicines must be considered. In order to create high-quality medication, the home industry must be equipped with the necessary infrastructure. This will boost Tanzanian customers' xenocentric tendencies when purchasing anti-malarial medications. In addition, the government must comprehend demographic factors and their impact on malaria medication, since this will aid in the development of marketing ploys that would appeal to all groups.

## **5. Conclusion and Recommendations**

In this study, it was observed that consumer xenocentrism appeared to lead to a preference for foreign over local products, even when domestic products were of higher quality. The researchers focused on three demographic variables namely: age, education, and geographic disparities.

**Age:** Age disparities were discovered to have an impact on customers' choice of malaria medicine in this study. Older consumers, for example, were found to be less xenocentric when purchasing anti-malarial treatments because their age reduced their ability to learn more about the various anti-malarial brands. As a result, when obtaining anti-malarial medications, they relied on the advice of experts. Furthermore, elderly customers were discovered to have limited financial resources; even if they had been willing to reject the opinion leaders' suggestion, they could not afford to obtain foreign anti-malarial treatments because they were relatively costlier. Younger consumers, on the other hand, were found to be more xenocentric when purchasing anti-malarial remedies, as they valued foreign anti-malarial remedies, believing that the technological advancement of the chosen and trusted countries would produce high-quality anti-malarial remedies compared to home-produced anti-malarial remedies.

**Education:** In this study, the level of education had an impact on Tanzanian customers while evaluating anti-malarial treatments in terms of xenocentric inclinations. Less educated customers were less xenocentric while purchasing anti-malarial medicines because they relied on opinion leaders to make decisions; as a result, they bought domestic anti-malarial medications. Consumers with a high level of education, on the other hand, assessed the quality of anti-malarial treatments prior to purchasing them. They judged the quality of anti-malarial treatments based on factors such as country of origin, brand, price, and dosage days. The majority of individuals with a high level of education preferred imported anti-malarial medications because they anticipated they would be of higher quality than domestic anti-malarial meds. That is, highly educated customers are more xenocentric in their anti-malarial drug purchases than those who are less educated.

**Geographical Differences:** The location of a consumer's residence has an influence on their malaria medicine purchasing behaviour in Tanzania. Most rural consumers relied on opinion leaders and doctors in such areas were likely to prescribe the ALU anti-malarial medication. Consumers who sought assistance from pharmacists were also urged to use the ALU to treat malaria. Furthermore, most rural pharmacies had a restricted variety of anti-malarial brands, as the degree of income of rural customers prompted pharmacists to only sell domestic anti-malarial medicines, which were accessible to the majority of rural consumers. As a result, consumers in rural areas have limited understanding about foreign anti-malarial treatments, preventing them from using them. Urban consumers, on the other hand, were found to have a diverse range of anti-malarial brands from other countries. Most consumers in urban areas engaged in a variety of income-generating activities, therefore their lifestyle was affected by their environment. Consumers, particularly those without a doctor's prescription, were questioned by pharmacists which brand of anti-malarial. This increased their selection of anti-malarial treatments, and some urban consumers were interested in purchasing anti-malarial therapies from other countries. As a result of being exposed to foreign anti-malarial treatments, urban consumers were more likely to acquire them. As a result, as previously noted, there is a strong relationship between demographic features and the extent of xenocentric inclinations in the Tanzania market.

The quality of domestic anti-malarial remedies was questioned by a large number of consumers, which has implications for policymakers. As a result, some consumers prefer foreign anti-malarial medications to domestic anti-malarial medications. The government through the Ministry Health and Social Welfare and Tanzania Medicines and Medical Devices Authority (TMDA) in collaboration with the Ministry of Industry and Trade should monitor the quality of the domestic pharmaceutical industry in order to produce medication of a high standard and quality. Furthermore, the ALU anti-malaria medication, which is locally produced in Tanzania required the consumption of many pills to complete a dozen (24 tablets per course for adult and 12 tablets per course for a child), which significantly discouraged its usage. The government, through the appropriate authorities, should consider ways to lower the number of ALU pills every course from 24 to 9-12 for adults and 12 to 6 for children without compromising the medication's efficacy. Improving the quality of domestic anti-malarial remedies and standardizing domestically produced anti-malarial courses will encourage more Tanzanians to value home-made anti-malarial remedies, hence increasing ethnocentric tendencies among consumers and boosting the country's economy.

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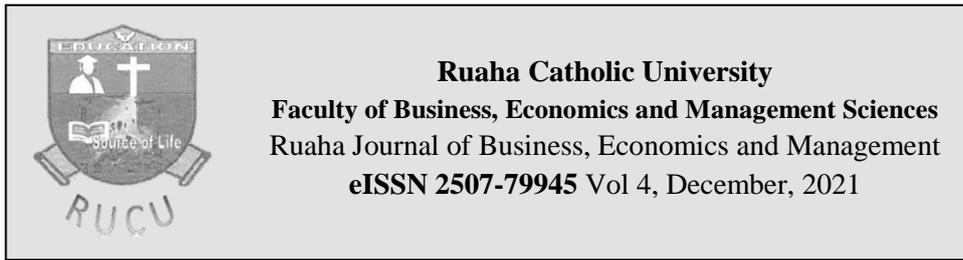
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## **Assessment of the Determinants of Employee Retention in Tanzania's Police Force: A Case of Iringa Municipality**

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### **Abstract**

*The overall objective of this study was to assess the determinants of employee retention in Tanzania Police Force. Specifically, to assess the effect of compensation on employee retention at Iringa Police Force, to examine the effect of work environment on employee retention in Iringa Police Force and to examine the effect of training and development on employee retention in Iringa Police Force. To accomplish the study's objective, the researcher created open-ended and closed questionnaires, which were both utilized to collect data from 83 respondents. Documentary review was also used, and the data's validity and reliability were tested using the KMO and Cronbach's Alpha. Software applications such as the statistical package for social science (SPSS) version 20.0 and Microsoft Excel were used to analyze the data. Compensation packages and work environment have a substantial positive effect on employee retention, however Training and Development did not, according to the findings of multiple regression analysis. as further revealed, remuneration and work environment attributes (fair salaries and a pleasant work environment) have an impact on employee retention. According to the study, top-level officers (DCP'S-IGP) should focus on establishing the necessary retention policies and procedures to maximize staff retention. Furthermore, the government should make a concerted effort to enhance the profile of police work-life balance. Special intervention measures should be aimed at enhancing the overall police infrastructure and paying police officers different wages in recognition of their unique roles in the country.*

**Key Words: Employee, Retention, Police Force**

## 1. Introduction

Employee retention is a concern for both government and non-government sector organizations. Motivating employees by providing a comfortable work environment, inclusion in decision-making processes, optimum pay, and acknowledging outstanding performance are all employee retention measures. Employee retention is becoming increasingly difficult for many organizations.

Human Resource Managers in organizations go through a time-consuming and costly process to mobilize their staff. Depending on the methodologies, the costs of recruiting and training a new employee are projected to be between half and one and a half times the annual compensation for the position in issue (Branham 2005, P.3). As a result, human resource managers derive means to save time and money by ensuring that workers do not easily quit their jobs.

Aguenza & Som (2012), for instance, highlight the significance of employee retention and involvement in an organization. This is due to the fact that they are the driving force behind planned development as well as the achievement of corporate goals and objectives. The essential aspect of the issue, according to Bisht, Chaubey, and Thapliyal (2016), is the identification of links between the elements that drive turnover and the deployment of appropriate retention methods. The myriad issues with the workplace, as well as how employees perceive the organization's incentives and promises, lead to a sense of compliance or violation of what has come to be described as a psychological contract. Breaches of promise frequently result in voluntary turnover, which is handled as a management issue since employees feel dissatisfied at work because their expectations are not met. As a result, according to Khan & Aleem (2014), keeping personnel, particularly the most talented, has become a big challenge for managers.

Beverley (2015) found that employee retention challenges occurs for a variety of reasons, including work discontent and distinctive circumstances. Low salary, poor interactions with superiors, insecurity, insalubrities, lack of recognition, and insufficient time are some of the reasons for job dissatisfaction. In terms of the specific circumstances, it is vital to emphasize one of the spouses' change of workplace, the acquisition of a better job, a lack of knowledge or skills for work, or even an interest in establishing own businesses (endeavor). In any case, it is uncommon for people to leave employment where they are content and fulfilled.

The primary goal of retention is to avoid the departure of capable individuals, which could have a negative impact on productivity, service delivery, and performance. Employee retention is critical to any organization's health and long-term success, according to Das and Baruah (2013) and Ampomah and Cudjor (2015). As a result, it is management's primary responsibility to encourage employees to stay with the company for a long period.

Tanzania's labor market has seen massive transformations. The existence of long-serving staff is seen as a sign of internal competency by organizations. However, as a result of economic liberalization, new career opportunities for experts in most industries have opened up, enhancing their chances of increased mobility between organizations. Turnover is now

regarded as having a detrimental impact on a company's growth. As a result, corporate leaders strive to keep employee turnover low. currently, organizations have to compete to keep employees for extended periods of time. These organizations are concentrating on attracting the best people, selecting them, and then retaining them. Employers must implement procedures that benefit both the organization and employee and lead to high performance standards in order to retain personnel. It is critical to attract policy-driven and prospective personnel in order to generate a sense of affinity between company principles and employees. Employees will feel more connected and involved with the organization if their supervisors support them, and they will in turn remain loyal to their institutions (Gentry et al., 2016). The United Republic of Tanzania's Police Force is founded on the country's Constitution and operates under the Ministry of Home Affairs. Section 5 of the Tanzania Police Force and Auxiliary Service Act Cap 322, 2002 outlines the Force's fundamental functions, which include ensuring the safety of people and property by maintaining the peace, maintaining law and order, preventing and detecting crime, and apprehending and guarding offenders (Force, Tanzania Police Force Annual Report, 2008).

Workers must work for a long time in order to achieve the goals and objectives of the Tanzania Police Force, and they must be provided with the essential resources to enable them to work with passion and efficiency. However, in comparison to prior years, the Police Force currently has a retention difficulty, with the biggest challenge being the loss of trained and talented employees. Not only are there effects of high staff turnover, but there are also effects of poor employee retention, where skilled and talented employees are unable to transfer to other organizations due to a lack of vacancies, so they remain in the same organization while working with low morale, delays, and frequent complaints, resulting in a demoralization of working status and difficulties in achieving organizational goals, aims, vision, and mission.

Job security is defined as the certainty that an employee's job will not be lost due to the country's overall economic situation (James, 2012). It is concerned with whether or not a person will be able to keep his or her employment (Adebayo and Lucky, 2012). It is concerned with the likelihood of employees keeping their jobs in order to avoid being laid off (Simon, 2011). Jobs that are not covered by an indefinite contract or that cannot be guaranteed for a reasonable period of time are considered insecure. It is also perceived as the employees being free of the fear of being fired from their current job or losing their job. Some occupations and work activities offer more job security than others. Job security refers to an employee's assurance or belief that they will be able to keep their current job for as long as they choose (businessdictionary.com). It is the organization's promise that its employees will stay with them for a reasonable period of time without being erroneously terminated (Adebayo and Lucky, 2012; Simon, 2011).

Several factors, including an individual's employment contract, collective bargaining agreement, labor legislation, and personal factors such as education, work experience, job functional area, industry, and location, all play a role in determining the need for an individual's services and impact their personal job security (Adebayo & Lucky, 2012). On the other hand, vital or necessary abilities and previous experience required by employers,

subject to the present economic situation and business environment, may ensure an individual's job security (Adebayo& Lucky, 2012).

## **1.1 Research Objectives**

Objectives of this study were two folds, the general and specific objectives as detailed below:

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### **1.1.1 General Objective**

The goal of this study was to determine the factors that influence staff retention in the Tanzania Police Force, using the Iringa Region as a case study.

### **1.1.2 Specific Objectives**

The following specific objectives were investigated in order to attain the above-mentioned ultimate objective.

- i. To assess the effect of compensation on employee retention in Iringa Police Force.
- ii. To examine the effect of work environment on employee retention in Iringa Police Force.
- iii. To examine the effect of training and development on employee retention in Iringa Police Force.

## **1.2 The Scope of the Study**

The study was limited to Iringa municipality, and the area is thus considered representative of the entire population because Iringa police station has a sufficient number of employees from various departments. The sample size for this study totals 85 respondents of various ranks, including Human Resource Management and Finance, Field Force Unit, Criminal Investigation Department, General Duties Department, and others.

## **2.0 Literature Review**

### **2.1 Theoretical Literature Review**

This study was guided by Herzberg's two-factor's theory.

#### **The Two-Factor Theory (Herzberg's Motivation-Hygiene Theory)**

Two component theories can be used to better describe the concept of satisfaction in keeping employees in an organization. After studying the factors in the work environment that caused satisfaction and dissatisfaction among workers, Frederick Herzberg (1959) proposed a two-factor theory. Hundreds of workers were interviewed during times when they were highly motivated to work and other times when they were dissatisfied and unmotivated at work. Two component theories can be used to better describe the concept of satisfaction in keeping employees in an organization. After studying the factors in the work environment that caused satisfaction and dissatisfaction among workers, Frederick Herzberg (1959) proposed a two-factor theory. Hundreds of workers were interviewed during times when they were highly

motivated to work and other times when they were dissatisfied and unmotivated at work. According to him, some employment parameters lead to job satisfaction while others lead to discontent. The inverse of "satisfaction" is "no satisfaction," and the opposite of "dissatisfaction" is "no dissatisfaction," according to Herzberg. These job characteristics were divided into two groups by Herzberg: hygiene and motivational factors.

- a) Hygiene factors: These are the employment variables that are required for motivation to exist at work and these include; Pay, company and administrative policies, fringe benefits, physical working conditions, status, interpersonal interactions, and job security. Their presence offers a conducive environment for labor, yet variables alone are insufficient to encourage people to work. People can be dissatisfied by their absence, but they cannot be satisfied by their presence alone. This suggests that these factors do not lead to positive satisfaction, but they do lead to discontent if they are lacking.
- b) Motivator Parameters: The hygienic factors, according to Herzberg et al. (1959), cannot be considered motivators. Positive contentment is a result of the motivational elements and these aspects of the job are unavoidable since they foster employee performance.
- c) These elements are known as satisfiers and play a role in the job's accomplishment. These factors are deemed to be intrinsically rewarding by employees since they represent the psychological needs that are considered beneficial. Employees should be commended and recognized for their efforts by their bosses, which is one of the motivational parameters. Employees must also have a sense of accomplishment, which varies depending on their role. There must be some benefit from the employment, and a company must provide opportunities for growth and promotion to motivate employees. Employees must take personal responsibility for their work. Managers should give them a sense of work ownership and control while maintaining accountability. For the employee to perform and get motivated, the work itself should be meaningful, engaging, and rigorous. Understanding the various aspects of a job that may promote satisfaction or, at the very least, diminish discontent would be the first step in developing a plan for retaining high-quality employees. Raju (2004). Herzberg's hypothesis was utilized by Ewenet and colleagues (1966) to assess job satisfaction. Maidani (1991) compared work satisfaction among public and private sector employees using the two-factor approach.

The Herzberg two-factor theory is a motivation theory that was constructed to analyze employee motivation. However, because it has been empirically validated, this study regarded it as useful in evaluating employee retention. Employees who are driven or satisfied at work are more likely to stay with their companies, according to the researchers. Employees who are driven or satisfied at work are more likely to stay with their organizations, according to the researchers. Several empirical investigations, such as Adzei and Atinga's linked motivation and retention of Ghanaian health workers, and have demonstrated the relevance of this approach in investigating employee retention. Chen et al. investigated employee retention using Herzberg two factor theory and discovered a

substantial link between remuneration and retention. According to a study conducted by Rakhra on employee retention at Indian organizations, remuneration had a significant role in staff retention. In a study of employee retention in Malaysia, Hong et al. discovered a substantial link between remuneration and staff retention. When Eberendu and Okere looked at motivation as a factor in employee retention, they discovered that performance-based compensation was one of the most important employee motivator factors. Similarly, Kanwal and Majid found that low compensation, the absence of incentives, and reward plans had a substantial impact on staff retention in Pakistan's banking industry.

## **2.2 Empirical Literature Review**

### **2.2.1 Effects of Compensation on Employee Retention**

According to Adilet al. (2017), securing employment in Afghanistan universities is increasingly challenging, maybe due to a lack of a robust payment structure. The major goal of this study was to assess how remuneration packages affected job satisfaction and staff retention. The researcher created closed-ended questionnaires with 24 items to accomplish the study's objective, and the participants were academics and administrative employees from six private universities in Jalalabad. 275 questionnaires were distributed, 257 were retrieved while 7 were incomplete, therefore, 246 were valid which represented 89% response rate. The convenient sampling technique was used for data collection and data was analyzed using Statistical Package for Social Sciences (SPSS) version 20.0 for estimating regression and correlation models for testing hypotheses. The study revealed that compensation packages have a significant positive relationship with job satisfaction and employee retention in private universities. The researchers suggested that compensation packages should be revised and updated according to the current labour market to attract, motivate and retain qualified employees for the future success of academic institutions.

Pallangyo (2017) investigated on the influence of compensation on employee retention of the banking institutions in Tanzania. The stratified sampling technique was used to ensure the representativeness of each bank category. Eleven banks were purposely selected and simple random sampling was applied to draw a sample of 370 employees. Quantitative data were collected using a survey questionnaire and analyzed using Binary logistic regression. Findings indicated that compensation significantly influenced employee retention with a 'p' value of 0.001. It was further revealed that the compensation attribute (fair salary) has significant influence on employee retention. The report advises bank executives to establish and implement retention plans that take into account fair remuneration, as this is a highly appreciated compensation attribute. Furthermore, in order to boost employee retention, bank managers must pay close attention to appropriate retention practices. The study recommends to the bank managers to develop and implement retention policies that contemplate fair salaries as this is a most valued compensation attribute. Furthermore, the bank managers need to pay great attention to right retention policies in order to improve retention of employees.

According to Shao (2013), in order to keep the top employees, initiatives geared at meeting their demands are undertaken; yet, the question remains as to how effective each strategy is in terms of total employee retention. The major goal of this study was to determine the

characteristics that have the greatest impact on staff retention in Tanzanian public organizations, utilizing Mwanza Regional Secretariat as a case study. The study included 40 respondents constituted of top, middle, and lower-level personnel. Job security, training opportunities, salary amounts, working environments, participative decision making, allowance availability, relationships at work, retirement benefits plans, and promotion opportunities are some of the factors that primarily influence employee retention at the Mwanza Regional Secretariat, according to the study's findings. The difference is in the implementation; those that are implemented as required, such as job security and retirement benefits plans, have a positive impact on employee retention; those that are poorly implemented, on the other hand, act as a hindrance to employee retention efforts, resulting in labor turnover, employee transfers, low working morale, and partial achievement of organizational goals. The secretariat's retention challenges can be solved by focusing more on financial incentives, such as raising employee salaries, because respondents appreciate them more than non-financial incentives, according to the research.

Kazumba (2012) analyzed the factors that influence graduate police officers' retention in the Tanzanian police force (TPF). The study's primary goal was to establish the nature and extent of TPF staff departure, as well as the effectiveness and efficiency of TPF employee retention measures. Employees from the TPF Headquarters and the Dar es Salaam Police Special Zones of Kinondoni, Ilala, and Temeke participated in the study. There were 120 responders in total, selected from the TPF Human Resource Department/Management, the Ministry of Home Affairs Human Resource Department/Management, retired police officers, and Dar es Salaam Police Special Zone personnel. Data was acquired using a variety of methods, including questionnaires, interviews, and documentary reviews. The majority of police officers who left the force were rank and file policemen, according to the conclusions of the study. These individuals typically quit the police force in their early years of service, upon receiving higher-level graduate degrees. Low and uneconomic salaries, under-utilization of acquired knowledge and professional qualifications, the general need to find greener pasture outside the police establishment, lack of timely promotions, and an unconducive environment for TPF employees have all been identified as major contributors to TPF staff resignations. According to the findings, the TPF's current retention techniques are inefficient in retaining graduate police personnel, necessitating an urgent overhaul. As a result, the TPF should develop and implement particular employee retention policies and strategies that address recruitment, placement, and selection, as well as optimal human resource utilization, development, compensation and benefits, employee relations, and safety and health. Furthermore, TPF HR members should adopt a new mindset and become dedicated professionals focused on executing retention tactics that will result in significant changes in the force. In addition, the government should take purposeful steps to improve the police's economic, social, and political stature. Special intervention measures should be aimed at upgrading police infrastructure in general and paying police officers due wages in recognition of their accomplishments in public service.

### **2.3.2 Effects of Work Environment on Employee Retention**

Kundu & Lata (2017) investigated the mediating effect of organizational engagement in the relationship between supportive work environment and employee retention. Primary data was accrued from 211 respondents in 67 selected organizations. Confirmatory factor analysis was used to ensure the dimensionality and validity of study variables and the hypothesized model was tested using the multiple regression analysis. According to data findings, a positive work environment is important in predicting employee retention. The association between a positive work environment and employee retention is partially mediated by organizational involvement. The implications of the study are however limited to an Indian environment and a cross-sectional design. Furthermore, although the sample size is reduced, the results remain unaffected. The role of a supportive work environment and organizational involvement is currently understudied. The current study therefore focuses on the role of organizational engagement as a mediating factor in the relationship between a supportive work environment and employee retention.

Muhoho (2014) examined the factors that influence employee retention in Tanzania's private and government sector workplaces in his study. The focus of the research was to uncover and examine the elements that employees perceive as forces impacting workplace retention in each sector, and to investigate employers' psychosocial aspects and the various tactics employed by firms to retain their best employees in each sector. Semi-structured, closed and open-ended questionnaires, Focus Group Discussions, key informants, and document reviews from various libraries and internet resources were all employed in the research. A total of 70 employees were recruited from ten (10) different organizations for this study. Version 20.0 of the Software Package for Statistical Science (SPSS) and Excel were used to analyze data. According to study findings, Tanzania's organizations are generally challenged by high rates of employee turnover, while retention was relatively higher in public organizations, particularly higher learning institutions. Low salaries and incentives were also cited as a major factor for resigning, according to the survey. Employer personal attributes, such as organizational justice and prestige, were also noted as having an impact on employee retention. Increasing compensation was recognized as the most common approach adopted by most organizations to keep their personnel. As a result, the study suggests that the selected organizations and others conduct regular remuneration reviews, structure good retirement plans, and foster a pleasant or conducive work environment that provides and creates opportunities for further development, continuous renewal and learning, and deepening of employee motivation in order to contribute stupendously to the organization's performance, workplace excellence, and competitive advantage.

### **2.3.3 Effects of Training and Development on Employee Retention**

Muceke et al. (2012) assessed the "Determinants of Academic Staff Retention in Kenyan Public Universities." The research was primarily conducted for academic staff at Kenyan universities. Leadership, distributive justice, work environment, salary, promotional possibilities, training and development, autonomy, and recognition were all explored as factors of employee retention. Employees from other public colleges, private universities, and

other corporate sectors competed locally, it was found. It is clear that academic staff retention in Kenyan public universities is a critical concern, and it was projected to become even worse with the surge in intake in the 2011/12 academic year. Universities, it was further asserted, held the key to achieving Vision 2030 by equipping the workforce with the necessary skills and knowledge. These institutions would be able to fulfill this laudable purpose only if they had sufficient human and other resources.

Mwita (2018) studied the Influence of Leadership on Employee Retention in Tanzania Commercial Banks and found that leadership influenced both employee retention and turnover. Training and development, recruiting and selection, remuneration, and other Human Resource Management activities are all areas where companies spend and invest heavily in their personnel. This implies that letting go of an employee is one of the most expensive human resources decisions. Employee retention has been investigated in Tanzania through several studies that link it to other aspects such as training and development, pay, working hours, working environment, and promotion, among others.

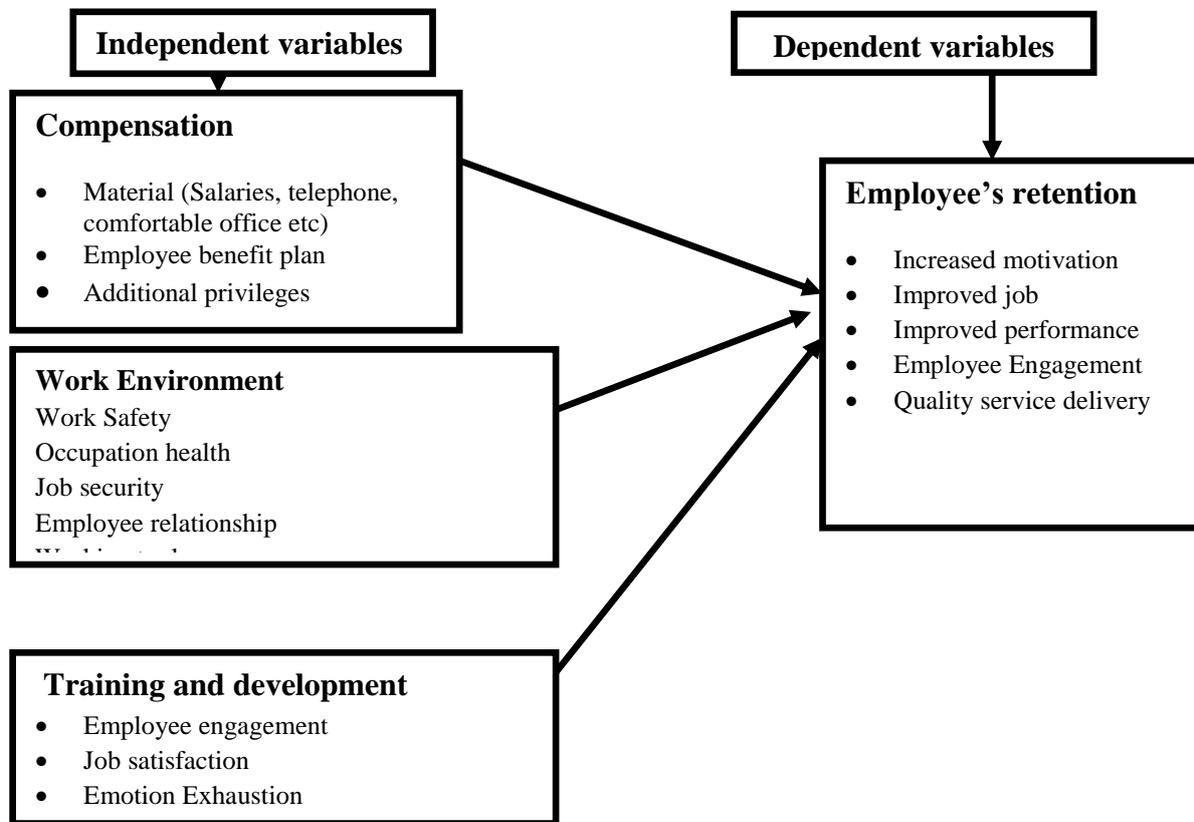
The relationship between leadership and staff retention was investigated in this study. The study used questionnaires to collect data from Akiba Commercial Bank (Buguruni Branch) and Tanzania Postal Bank (Morogoro Branch) as study cases. The link between the variables was investigated using linear regression analysis. In Tanzanian commercial banks, it was discovered that there is a large linear association between leadership and employee retention. Because managing and leading go hand in hand, the study advises providing leadership training to bank managers and supervisors. It also urges managers and supervisors to obtain input from their subordinates on how they view leadership styles in their banks and make changes before employees decide to quit.

Mwakaupugi (2012) did research on "Staff Training and Development Practices in Pension in PSPF Head Office, Dar es Salaam, and five of its Regional Offices, in Arusha, Manyara, Singida, Dodoma, and Morogoro." The efficacy of training and development programs was shown to be dependent on the entire process of assessing, creating, developing, executing, and evaluating them, according to this study. Despite the fact that respondents commented on the presence of a training and development policy at PSPF, the policy was only a provisional draft and had not been used as a guideline, according to the study.

## **2.5 Conceptual Framework**

The conceptual framework of this study on the factors of employee retention in the Tanzania Police Force can be described by salary, work environment, and training and development variables. All of these are the study's independent variables, while employee retention is the study's dependent variable or effect.

**Figure 1: Conceptual framework**



## 2.6 Formulation of Hypotheses

The following hypotheses revealed the association between two or more factors with employee retention in the current study.

*H<sub>0</sub> Compensation has a negative effect on employee retention at Iringa Police Force.*

*H<sub>1</sub> Compensation has a positive effect on employee retention at Iringa Police Force.*

*H<sub>0</sub> Work Environment has a negative effect on employee retention in Iringa Police Force*

*H<sub>2</sub> Work Environment has a positive effect on employee retention in Iringa Police Force.*

*H<sub>0</sub> Training and development has a negative effect on employee retention in Iringa Police Force.*

*H<sub>3</sub> Training and development has a positive effect on employee retention in Iringa Police Force.*

## 3. Methodology

The goal of this study is to determine the factors that influence staff retention in the Tanzania Police Force. The quantitative research approach was used to profile the effects of employee retention and describe the determinants of employee retention in the Tanzania Police Force. A descriptive design was used to profile respondent characteristics in order to fit them into a

strategic framework for action that connects the research question to the study's end goal. Employee retention was profiled and characteristics impacting employee retention were described in this study using an explanatory research approach. The research was carried out in the Iringa Region, specifically in Central Police and Regional Departments, in five departments and units to include: administrative, field force, criminal investigation, general duty, traffic, and stock theft prevention.

The study's target group was drawn from current employees who worked at the institution between January 2010 and May 2021. The population was subdivided into four (5) departments: Criminal Investigation Department (CID), Traffic Department (TD), General Duty (GD), Field Force Unit (FFU), and Stock Theft Prevention Unit (STPU) (STPU). The research was conducted in selected police stations in all Iringa regional wards. To estimate the sample size of the study, the researcher used purposeful sampling and selection of respondents. The study's target population was 250 workers for the Iringa Municipal Police Force. The population was divided into operating groups, and the institution has five (5) units: Criminal Investigation Department (CID), Traffic Department, General Duty (GD), Field Force Unit (FFU), and Stock Theft Prevention Unit (STPU). Each operational group (stratum) had a stratified random sampling taken in a number proportional to the size of the stratum as compared to the population.

**Table 3.1: Sampling design, study population and data collection tool**

Random Sampling of the study population	Target Population	Sample Size	Sampling design	Data collection Tool
<b>Respondent category</b>				
Criminal Investigation department (CID)	53	18	SRT	Questionnaires
Traffic department	55	18	SRT	Questionnaires
General Duty department (GD)	53	18	SRT	Questionnaires
Field Force Unit (FFU)	48	16	SRT	Questionnaires
Stock Theft Prevention Unit (STPU)	36	13	SRT	Questionnaires
Random sampling two (2) Heads of Thematic groups will be Purposefully selected	5	2	NRS	Questionnaires

**Source: Researcher (2021)**

Data was gathered using both primary and secondary data collection techniques, as described below. As indicated in Table 3.1, questionnaires were prepared and distributed to 85 randomly selected police officers who operate in various theme groups.

#### 4. Data Analysis, Interpretation and Discussion of Findings

##### 4.1 Test of Reliability and Validity of the Study

By applying Cronbach's Alpha, the researcher was able to determine whether all variables were valid and reliable:

##### 4.1 Reliability Test

The Reliability Statistics Table, shows the value for Cronbach's alpha, which in this case is .789, .902, and .700 for compensation, working environment, and employee retention, respectively, indicating strong instrument reliability. It denotes a high level of internal consistency for the sample in question. In addition, there is a .348 for training and development, indicating that the measuring instrument is unreliable.

**Table 4.1: Reliability Statistics**

Variables	Cronbach's alpha	No of items
Compensation	0.789	9
Work environment	0.902	9
Training and Development	0.348	11
Employee retention	0.700	9

Source: Research Findings, (2021)

##### 4.2 Validity Test

According to Table 4.2 below, the Bartlett's Test of Sphericity showed that data variables obtained after the data reduction process were significant (0.000) and measured the dependent variable with a Kaiser-Meyer-Olkin value of 0.712, 0.891, 0.459 and 0.778 for compensation, work environment, training and development and employee retention in accordance to Kaiser who states that the results from factor analysis can be considered acceptable if the Kaiser-Meyer-Olkin value (KMO) is 0.5 or greater, and the Bartlett's test of sphericity is statistically significant,  $p < 0.05$  therefore the Factor Analysis is valid for compensation, work environment and employee retention, hence the researcher is confident that factor analysis is appropriate for accrued data, although it is not valid for training and development.

**Table 4.2: KMO and Bartlett's Test**

Variables	Chi-square	KMO	P-value
Compensation	293.679	0.712	<0.001
Work environment	379.336	0.891	<0.001
Training and Development	136.22	0.459	<0.001
Employee retention	210.66	0.778	<0.001

**Source:** Research findings, (2021)

### 4.3 Findings

#### 4.3.1 The Effects of Compensation on Employee Retention

The researcher examined the impact of pay on personnel retention at the Iringa Police Force. respondents were provided with some basic questions and were required to express their agreement or disagreement to a set of statements. The results were as shown on table 4.3 below.

**Table 4.3: The influence of compensation on employee retention**

Compensation items	To very little extent	To little extent	To some extent	To great extent	To very great extent
Police Officers’ satisfaction with the existing salary package	49(59%)	10(12%)	20(24.1%)	2(2.4%)	2(2.4%)
Adequate and merit-based salary increment	49(59%)	20(24.1%)	12(14.5%)	1(1.2%)	1(1.2%)
Competitiveness of the force’s pays scale	44(53%)	19(22.9%)	16(19.3%)	3(3.6%)	1(1.2%)
Effective communication of the compensation policy to employees	44(53%)	19(22.9%)	0(0%)	16(19.3%)	4(4.8%)
The force allocates a special incentive package for staff performance	48(57.8%)	15(18.1%)	16(19.3%)	3(3.6%)	1(1.2%)
Employer provides opportunities to employees to share their ideas	31(37.3%)	21(25.3%)	25(30.1%)	4(4.8%)	2(2.4%)
The fringe benefits are fair	41(49.4%)	24(28.9%)	13(15.7%)	2(2.4%)	3(3.6%)
Employees’ retention in the force is owed to staff rewards and benefits	32(38.6%)	26(31.3%)	14(16.9%)	11(13.3%)	0(0%)
A financial reward mechanism has a vital role in employee retention	18 (21.7%)	11 (13.3%)	21 (25.3%)	11 (13.3%)	22 (26.5%)

**Source; Researcher (2021)**

Table 4.3 shows that 49 (59%) of Police Officers agreed to a very limited extent that they are satisfied with their current compensation package. 49 (59 %) agreed to a very limited extent that there are adequate and merit-based salary increases and 44 (53 %) agreed to a very limited extent that the organization's pay scale is competitive. 44 (53 %) agreed that compensation policy is properly communicated to employees to a very limited level. 48 (57.8 %) agreed to a very limited extent that there is a force that assigns special incentive packages based on staff performance, and 31 (37.3 %) agreed to a very limited extent that employers give employees opportunities to express their thoughts. To a very little extent, 41 (49.4 %) agreed that the fringe benefits are fair. 32 (38.6 %) believed that employees prolonged stay in the force was attributed to rewards and benefits, whereas 22 (26.5 %) agreed that a financial compensation scheme plays an important role in employee retention.

**Table 4.4: The mean distribution of compensation on employee retention**

Item	Mean	Rank	Decision
A financial reward mechanism has a vital role in employee retention	3.10	1	Great extent
The employer provides employees with opportunities to express ideas	2.10	2	Little extent

Employee retention in the force is attributed to rewards and benefits	2.05	3	Little extent
Police force fringe benefits are fair	1.82	4	Little extent
Police Officers are satisfied with the current salary package	1.77	5	Little extent
The police force uses a competitive pay scale	1.77	6	Little extent
The compensation policy is effectively communicated to employees	1.76	7	Little extent
The force allocates a special incentive package for staff performance	1.72	8	Little extent
The force has an adequate and merit-based procedure of salary increment	1.61	9	Little extent

**Source; Researcher (2021)**

Table 4.4 displays the responses of police officers to various item ratings on compensation, revealing that the majority affirmed to a large extent that the financial compensation mechanism plays a vital role in employee retention (mean=3.10) while other variables had a minimal impact.

#### 4.4.2 Effects of Work Environment on Employee Retention

The researcher investigated the impact of the work environment on staff retention at the Iringa Police Force and findings are as presented on table 4.5 below.

**Table 45: The influence of the work environment on employee retention**

Working environment parameters	To very little extent	To a little extent	To some extent	To a great extent	To a very great extent
The police force provides its employees with enough working tools for their regular operations.	29(34.9%)	35(42.2%)	13(15.7%)	5(6.0%)	1(1.2%)
There are stress management initiatives throughout the organization.	43(51.8%)	21(25.3%)	15(18.1%)	3(3.6%)	1(1.25%)
Employees are respected.	29(34.9%)	27(32.5%)	22(26.5%)	3(3.6%)	2(2.4%)
A job well done is valued	27(32.5%)	24(28.9%)	23(27.7%)	5(6%)	4(4.8%)
Employee ideas and grievances are taken into account.	36(43.4%)	25(30.1%)	17(20.5%)	4(4.8%)	1(1.2%)
The supervisors periodically reinforce and support the working system	31(37.3%)	19(22.9%)	27(32.5%)	4(4.8%)	2(2.4%)
The working environment is open and trustworthy	40(48.2%)	16(19.3%)	20(24.1%)	4(4.8%)	3(3.6%)
Employees are given authority and responsibilities.	30(36.1%)	25(30.1%)	19(22.9%)	7(8.4%)	2(2.4%)
The morale in the organization is high	31(37.3%)	25(30.1%)	18(21.7%)	4(4.8%)	5(6.0%)

**Source; Researcher (2021)**

According to Table 4.5, 35 (42.2 %) of police officers agreed to a lesser extent that they are provided with adequate working equipment for regular tasks. 43 (51.8 %) agreed to a very limited extent that stress management programs exist in the organization. 29 (34.9 %) agreed to a very limited extent that employees are treated with dignity. 27 (32.5 %) agreed that good work is appreciated to a very limited extent. 36 (43.4 %) agreed that employee recommendations and grievances are taken into account to a very limited extent. 31 (37.3 %) agreed to a very limited extent that supervisors should encourage and support the working system on a regular basis. 40 (48.2 %) agreed that the working atmosphere is open and trustworthy to a very limited level. 30 (36.1 %) agreed to a very limited extent that employees are given responsibility and authority, and 31 (37.3 %) agreed to a very limited extent that organizational morale is excellent.

**Table 4.6: The mean distribution of the influence of the work environment on employee retention**

<b>Item</b>	<b>Mean</b>	<b>Rank</b>	<b>Decision</b>
A job well done is valued.	2.22	1	Little extent
Supervisors strengthen and support the working system on a regular basis.	2.12	2	Little extent
The morale in the organization is high	2.12	3	Little extent
Employees are allowed to take responsibility and authority	2.11	4	Little extent
The employees are treated with due respect	2.06	5	Little extent
Police force employees are provided with sufficient working tools for daily activities	1.96	6	Little extent
The working environment is open and trustworthy	1.96	7	Little extent
The employee’s suggestions and grievances are taken into account	1.90	8	Little extent
There are stress management initiatives in the police force	1.77	9	Little extent

**Source; Researcher (2021)**

Table 4.6 reveals that practically all items on the work environment were below the mean of 2.50, indicating that the work environment has a weak association with employee retention in the police force.

#### **4.4.3 Effects of Training and Development on Employee Retention**

The researcher analyzed the association between training and development and employee retention at the Iringa Police Force and the findings are as presented in table 4.7 below.

**Table 4.7: The influence of training and development item on employee retention**

<i>Response</i>	<i>Frequency</i>	<i>Percentage</i>
Training programs frequently are frequently conducted at our workplace		
Yes	62	74.7
No	21	25.3
I have attended a training program in our workplace		
Yes	72	86.7
No	11	13.3
Number of training programs conducted annually		
2	33	39.8
2 to 3	14	16.9
3 to 4	10	12.0
More than 5	26	31.3
Number of training attended		
2	34	41.0
2 to 3	14	16.9
3 to 4	13	15.7
More than 5	22	26.5
The training programs boosted my work efficiency		
Yes	78	94.0
No	5	6.0
The impact of the training program evaluated through:		
Performance	74	89.2
Feedback	9	10.8
Type of employee training provided by TPF		
On the job	61	73.5
off the job	1	1.2
Technical	21	25.3
Training and development program increase employee efficiency		
Yes	81	97.6
No	2	2.4
Training programs result to pay increment or promotions		
Yes	21	25.3
No	62	74.7
The following improvements should be made following training programs		
Redesigning the job	15	18.1
Remove interference	16	19.3
Reorganizing	15	18.1
Upgrade the information	37	44.6
My career foundation was strengthened by the various training programs I have attended		
Yes	29	34.9
No	19	22.9
Sometimes	35	42.2

**Source; Researcher (2021)**

According to Table 4.7, 62(74.7 %) agreed that the police force offers training programs, and approximately 72(86.7 %) have attended such training programs. Training programs that last two years or more are typical, with 59 (71.2%) of police officers having participated. Whereas 78(94.0 %) believe the training programs have enhanced their work efficacy, the

impacts of training have largely been measured by performance (74(89.2 percent). 61 (73.5%) respondents agreed that TPF employees receive on the job training, which has a 97a .6% contribution to work efficacy. Although training and development programs are offered by TPF, 64(77.1%) had attended career ground-based training however, 62(74.7%) of respondents disputed their contribution to pay increment or employee promotion. 37(44.6%) highly recommended information updates to improve police force operations.

**4.4.4 Determinants of Employee Retention**

The researcher assessed the factors that influence employee retention at the Iringa Police Force and findings are as shown in table 4.8 below.

**Table 4.8: Determinants of employee retention**

<b>Determinants of employee retention</b>	<b>To a very little extent</b>	<b>To a little extent</b>	<b>To some extent</b>	<b>To a great extent</b>	<b>To a very great extent</b>
Employee retention contributes to the growth of the organization.	6(7.2%)	9(10.8%)	23(27.7%)	25(30.1%)	20(24.1%)
A coordinated retention policy is established by the force for the employee.	35(42.2%)	18(21.7%)	19(22.9%)	5(6.05)	6(7.25)
There are no communication barriers while interacting with supervisors	33(39.85%)	15(18.1%)	23(27.7%)	10(12.0%)	2(2.4%)
I would like to further my career in this organization	15(18.1%)	18(21.7%)	16(19.3%)	17(20.5%)	17(20.5%)
I share my opinion regarding the workload	18(21.7%)	17(20.5%)	28(33.7%)	8(9.6%)	12(14.5%)
I get the recognition you deserve for your performance	27(32.5%)	9(10.8%)	13(15.7%)	14(16.9%)	20(24.1%)
Work-life balance is supported by the organization	33(39.8%)	11(13.3%)	28(33.7%)	9(10.8%)	2(2.4%)
I would encourage my friend/relatives to join the TPF	25(30.1%)	24(28.9%)	19(22.9%)	11(13.3%)	4(4.8%)
The implementation of the three R's (recognition, reward, respect) will increase employee retention	5(6%)	4(4.8%)	9(10.8%)	19(22.9%)	46(55.4%)

**Source; Researcher (2021)**

According to Table 4.8, 25 (30.1 %) respondents agreed that employee retention aids organizational development. 35 (42.2 %) agreed to a very limited extent that the organized retention policy is designed by the force for the employee, and 33 (39.85 %) agreed to a very limited extent that there are no communication obstacles when interacting with a supervisor. 18 (21.7 %) agreed to a lesser extent that they would like to work as a police officer in the future. 28 (33.7 %) agreed to some extent with the stance on workload. 27 (32.5 %) agreed to a very limited extent that they receive the recognition they deserve for their performance, and 33 (39.8 percent) agreed to a very limited extent that the organization supports work-life balance. 25 (30.1 percent) agreed to a very limited extent that they can recommend to friends/relatives to join the organization, and 46 (55.4 percent) agreed to a very high degree

that implementing the three R's (recognition, reward, and respect) will boost employee retention.

**Table 4.9: The mean distribution of employee retention**

Item	Mean	Rank	Decision
The implementation of three R's (recognition, reward, respect) will increase employee retention	4.17	1	Great extent
Employee retention fosters organizational development	3.53	2	Great extent
I have plans to further my career in this organization	3.04	3	Great extent
I get the recognition I deserve for performance	2.89	4	Great extent
Opinion regarding work load	2.75	5	Great extent
I would recommend my friends/relatives to join the TPF	2.34	6	Little extent
Work-life balance is supported by the organization	2.23	7	Little extent
There are no communication barriers while interacting with supervisors	2.19	8	Little extent
A coordinated retention policy is established by the force for the employee.	2.14	9	Little extent

**Source; Researcher (2021)**

Table 4.9 shows that police officers have generally indicated a high level of retention, with an average of 4.17 indicating that the implementation of the three R's (recognition, reward, and respect) will increase employee retention, with only an average of 2.34 suggesting that their friends/relatives join the organization.

#### **4.5 Correlation and Regression Analysis**

Pearson bi-variate correlation analysis was performed to calculate the linear relationships among determinants (Compensation, Work environment, training and development) and employee retention. Then, stepwise multiple regression analysis was done to predict employee retention in TPF of Iringa region.

##### **4.5.1 Pearson Correlation Analysis**

The Pearson correlation test was used to establish the relationship between each individual independent and dependent variable of the two independent variables and as revealed, compensation and working environment had a significant association with employee retention as their p-values were less than 0.01. The independent variable training and development had no significant relationship with retention in fact it had a negative connotation indicating that those who acquire skills through training and development eventually leave the organization for greener pastures.

**Table 4.1: Pearson Correlation Results**

		Compensation1	Training and Development1	Work environment	Employee retention
Compensation1	Pearson Correlation	1	-.010	.786**	.547**
	Sig. (2-tailed)		.927	.000	.000
	N	83	83	83	83
Training and Development1	Pearson Correlation	-.010	1	-.009	-.052
	Sig. (2-tailed)	.927		.938	.641
	N	83	83	83	83
Work environment	Pearson Correlation	.786**	-.009	1	.624**
	Sig. (2-tailed)	.000	.938		.000
	N	83	83	83	83
Employee retention	Pearson Correlation	.547**	-.052	.624**	1
	Sig. (2-tailed)	.000	.641	.000	
	N	83	83	83	83

**\*\*.** Correlation is significant at the 0.01 level (2-tailed).

For statistical analysis, the scatter plots of residuals were examined to check assumptions of normality, linearity and homoscedasticity. No violation assumptions were found. The standard convention level of  $P < .05$  was used for evaluating the statistical significance of all quantitative analyses performed in this study.

#### 4.5.2 Multiple Linear Regressions

**Table 4.2: Regression Coefficients**

Model	Unstandardized coefficients		Standardized coefficients	T	p-value
	B	Std. Error	Beta		
(Constant)	2.043	.773		2.642	.010
Gender	-.108	.179	-.053	-.604	.548
Age	-.076	.132	-.064	-.572	.569
Education level	.117	.059	.196	1.978	.052
Duration working with Iringa Region police force	-.129	.101	-.152	1.285	.203
Activity	-.111	.065	-.153	1.715	.091
Compensation1	.154	.188	.114	.816	.417
Training and Development1	-.396	.530	-.066	-.747	.458
Work environment	.674	.173	.547	3.891	<.001

Model summary(R-Square=0.462) Anova ( $F = 7.94$ ,  $P < 0.001$ ), Dependent Variable: Employee retention, Predictors: (Constant), Activity, and Age, Work environment, Training and development, compensation, Gender, Education level, Duration working with the Police Force in Iringa Region.

## **4.6 Discussion of Findings**

### **4.6.1 The Effect of Compensation on Employee Retention at the Iringa Region Police**

According to the findings of the survey, personnel at police stations credit continued employment to pay. Employee retention is impacted by compensated extra duties among others. Compensatory policies should therefore be fair however, the majority of police station personnel believe that they were not consulted when pay targets were established. The study findings on upgrading compensation packages as a strategy of retaining employees coincide with Lochheads and Stephens (2004), who stated that competitive and fair compensation was a crucial starting point in most efforts to recruit and retain personnel. However, there was a universal consensus that pay alone did not guarantee staff retention.

### **4.6.2 The Effect of Working Environment on Employee Retention at Police Force**

The study discovered that the working environment provided by police departments had an impact on staff retention. The majority of employees attribute their continued employment at the police station to a favorable working environment. Working conditions that provide opportunities for advantages such as a medical scheme, leave administration policy, education policy, and care at police forces. Similar findings were established in a study on the drivers of hospital nurse retention, and as concluded the working environment is an essential element in determining nurses' retention. Unavailability of required material resources, insufficient supportive physical environments, and insufficient nurse staffs are viewed as hazardous working circumstances, making it difficult to retain them in hospitals (Tourangeau, Cummings, Cranley, Ferron, & Harvey, 2010). Employees will be more likely to stay with organizations if they work in a safe atmosphere. Safety considerations are critical thus, staff will be dissatisfied in their absence, and consequently employee turnover (Appiah, Kontar, & Asamoah, 2013). The impact of the working environment on employee retention has been proven to be a critical challenge (Tummers, Groeneveld, & Lankhaar, 2013). Providing a good working atmosphere may also encourage nurses to stay on the job. Narang (2013) discovered that respondents strongly agreed on the working environment as one of the variables influencing their job retention. To ensure that their staff stay with the firm, they must provide a good working environment.

### **4.6.3 The Effect of Training and Development on Employee Retention in the TPF**

According to study findings, training and development have no substantial impact on personnel retention at Tanzania's police force while the work environment and salary are key drivers to employee retention at the Tanzania police force. Employees recognize the importance of training for career advancement, yet many believe that training opportunities are not distributed evenly. The study findings contradict earlier research that found that relationship training and development have a substantial impact on employee retention. According to Mondy and Noe (2005), training and development are the formal activities established by an organization to assist its personnel in acquiring the essential skills and knowledge to fulfill current or future tasks. Employees can gain valuable support, information, skills, and abilities through training and development activities such as job

training, coaching, mentoring, and counseling (Maths & Jackson, 2004). Furthermore, training provides employees with specialized skills to remedy poor performance, which is unfortunately not the case in TPF.

## **5. Implications of the Findings**

### **5.1 To the Government**

Tanzania's police force appears to have been abandoned by the government in recent years, as evidenced by the previous budgets of 2020/2021 and 2021/2022, in which the amount of money given to the force was two billion, the same as the current fiscal year, which is insufficient for the force to carry out its legal responsibilities in dealing with and combating crimes in order to maintain peace, order, and foster social, cultural, and economic development. Any country with a poor and inadequately organized police force is incapable of enriching its people, as they will always be exposed to security threat. The importance of this study is to push the government to create an appropriate and favorable atmosphere to ensure that the Tanzania Police Force is capable of completing its tasks. Instead of using Police officer's packages, provide sufficient funding as and solid support to the force in developing various projects related to training and development programs.

### **5.2 The Police Force and personnel**

The prime function of the police force is to maintain peace, security and ensure safety of the people and their property nationwide. The importance of this study to the police force is to enable police personnel to understand how vital retention measures are in completing fundamental duties and responsibilities in an exceptional, and efficient manner. Recently, training and development in the Tanzania Police Force seem to be considered as an option and of no priority, while encouraging on-the-job training to cut costs. A good example is that since 2018, no career advancement courses such as CRO, CID, intelligence, traffic course, and the like have been officially announced by the force, instead refresher courses are encouraged. The purpose of this study is, therefore, to stimulate and concertize the Force's top management in encouraging most training and development programs for a proper and productive environment of employee retention based on recent changes in science and technology all over the world, thus advancement in criminal's modus operandi.

### **5.4 To Human Resource Practitioners**

This study will equip human resource managers with employee retention strategies, areas of weakness, with the goal of improving employee retention in the TPF have also been identified in this study. Human resource managers should therefore provide fair compensation, a comfortable work environment, and training and development. This will result in a stable and solid institution for quality service delivery.

## **6 Recommendations**

### **6.1 Recommendations for Action**

any organization that values its employees should always strive to retain the same, by considering salaries, the work environment, and equitable training and development, which stimulate employee efficiency, contentment, and organizational commitment. It is vital to

highlight that, in addition to these three parameters, retention techniques that encourage employee retention result in additional advantages such as better productivity, lower employee turnover and absenteeism, and improved employee performance. Employee retention should always be the backbone of any organization, especially in TPF, in order to strengthen employees' abilities and, in the long run boost organizational performance.

## **6.2 Recommendations for Improvement**

The government should strengthen all police force retention strategies and initiatives by providing the necessary work equipment and renovating all facilities in poor condition. Training environments, such as police training schools and academies, should be conducive and foster a sense of comfort among students. Security is an integral part of national development, as it affords people peaceful living, which will enable them to engage in diverse social, cultural, and economic development, therefore flourishing the development of a country. The government should recognize the value of professional and gifted police personnel and strive to retain them. we, therefore, recommend that the government should ensure that all frustrations and stressors experienced by police officers as a result of their lack of training and development are addressed. The government, policymakers, and stakeholders should address all challenges currently impeding the implementation of police personnel retention policies.

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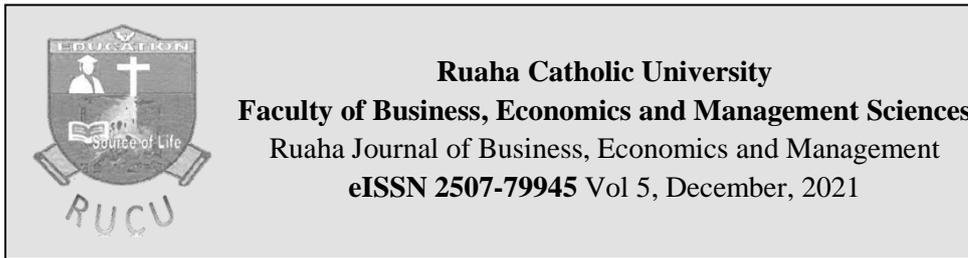
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## **Assessment of Factors Influencing Behavioral Intention to Adopt the Mobile Phone Billing System: A Case of Public Sector Clients in Tanzania**

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### **Abstract**

*The overall goal of this study was to determine the factors which influence behavioral intention to adopt the mobile phone billing system: a case study of government institution services consumers in Tanzania. The purpose of this study was to determine the impact of attitude on mobile phone billing system adoption among customers of government institution services in Tanzania, to investigate the impact of perceived behavior control on mobile phone billing system adoption among customers of government institution services in Tanzania, and to assess the impact of subject norm on mobile phone billing system adoption among customers of government institution services in Tanzania. The quantitative research approach was used to assess the extent to which behavioral government institution services consumers. Data was collected from 186 IRUWASA clients in Iringa using structured questionnaires. Multiple regression analysis and correlation analysis were performed on the data using the statistical package for social science (SPSS) and Microsoft Excel computer software applications. Cronbach alpha results showed that all of the variables in this study had achieved an acceptable range of internal consistency, with a Cronbach alpha p-value greater than 0.6. Consumers' attitude, subjective norm, and perceived behavior control are major behavioral intention parameters affecting government customers' intention to adopt the mobile billing system, according to data from multiple regression analysis. Based on the data, this study indicated that an attitude derived from the Theory of planned behavior may be used to investigate the impact of behavioral intention elements on the adoption of a mobile billing system among Government institution clients. There was a high correlation between subjective norms and the use of mobile billing by government clients. further conclusions are that if the parameters indicated above regarding perceived behavior control are maintained, customers are more likely to adopt mobile billing. According to the findings, the government, mobile phone network providers, and*

*banks should build mobile billing systems that are straightforward, compatible, convenient, and affordable to customers.*

Key words: ***Behavioral Intention, Adaptation, Mobile Phone Billing System***

## **1. Introduction**

A mobile phone in the information age is not only a personal communication device, but also a computing platform that connects users to a variety of services. Mobile billing, often known as mobile carrier billing, is a payment mechanism that allows users to pay for items using their phones rather than a more traditional payment method such as credit or debit card, bank transfer, or cash. Mobile carrier billing predates smartphones, yet it is still popular in developed and emerging nations since it is convenient, secure, and easy to use (Paymentwall Team, 2016). Today's mobile money sector includes a plethora of seasoned providers with a diverse set of operating capabilities, a comprehensive product portfolio, and a global reach. Mobile money is becoming the road to financial inclusion in most low-income nations, with 290 operational services in 95 countries and 372 million active accounts. (According to the GSMA, 2019). For example, 22 percent of the population in Bangladesh uses mobile money, compared to 34 % in Ivory Coast, 43 % in Uganda, 72 % in Kenya, and 40 % in Tanzania. (2016, *ibid.*)

Information and communication technologies (ICTs) have entwined the world in digital networks, and none is more widely used than mobile technology, which has about 9 billion subscriptions worldwide (Dean, 2020). The integration of ICT in education improves access, equity, quality, and relevance of basic education, while stimulating and improving teaching and lifelong learning, as stated in Tanzania's basic education ICT policy of 2016. In a similar vein, the Tanzanian National ICT Policy of 2016 clearly states that technological convergence has resulted in rapid changes in other areas of education, particularly in areas such as knowledge creation, processing, storage, sharing, dissemination, and assimilation at all levels of education and training, as well as in work output and productivity. Users can access mobile commerce services such as mobile banking, mobile investing, mobile auctions, and mobile shopping by simply installing a mobile phone with one or more sim cards or installed software. According to e-marketer (Aug, 2016), mobile phone shopping would increase to US\$4.058 trillion in 2020 and accounts for approximately 14.6 % of the entire e-commerce market.

Since its launch in 2009, the Mobile phone billing system program of GSMA has been collecting and analysing data on the availability, accessibility, adoption and usage of mobile phone billing system globally and the sub-Saharan Africa has been rated the first in the whole world with 45% of the total registered mobile money accounts. In a recent survey published by GSMA entitled 2019 Global Mobile phone billing system Adoption Survey“, The number of active mobile phone billing system accounts globally, which is growing quickly has

reached 1.04 billion as of June 2019, with 469.2 million alone in Sub-Saharan Africa (GSMA, 2019).

There are now more mobile phone billing system outlets than bank offices in many nations. There are 7.1 million mobile phone billing system agents worldwide (GSMA, 2018). The introduction of these services in emerging nations has piqued the interest of a number of stakeholders in the financial sector. popular mobile billing services include; person to person(P2P) services, mobile phone billing system transfer (MMT), pay bill services, loan to clients, and access to a wide range of banking services, such as account balances, mini statements, and money transfer from mobile phone to a bank account (Muisyo,2014).

Since the service's inception in 2008, Tanzania has seen tremendous development in the use of mobile phone billing systems. With multiple suppliers vying for market share, a slew of new use cases has emerged, including digital credit, savings, and bill payments, among others. In 2017, about a decade after the first mobile phone billing system was deployed, 60% of Tanzanians had used it (FSDT, 2017). The following M-money products are currently available in Tanzania: Vodacom M-Pesa, TigoPesa, Airtel Money, Halo pesa, and T-pesa (TTCL). In addition, the National Microfinance Bank (NMB), TPB, and CRDB banks all provide a mobile application that allows clients to send money to anyone in Tanzania who does not have a bank account using their phones. Furthermore, these customers use their mobile phones to make a variety of payments.

Previous research on mobile commerce, particularly, Davis's, Bagozzi's, and Warshaw's (1989) technology acceptance model (TAM), has primarily focused on determining the combined impact of independent variables such as compatibility, perceived usefulness, and perceived ease of use on the dependent variable of actual use via the mediating variables of attitude and behavior intention. The relative importance of each of the independent variables has received little attention. This study covers that research vacuum by determining attitude, subjective norm, and perceived behavior on the adoption of a mobile phone billing system among clients of government institution services in Tanzania, using the theory of planned behavior (TPB). Understanding the relative relevance of these characteristics will aid mobile commerce practitioners in focusing their limited resources on the most productive areas.

### **1.1. General Objective**

The general objective of this study was to assess the factors that influence of behavioral intention to adopt the mobile phone billing systems among Customers of government institution services in Tanzania

### **1.2. Specific Objectives**

This study sought to fulfill three specific objectives as stipulated below:

- a. To assess the influence of attitude on the adoption of the mobile phone billing system among customers of government institution services in Tanzania.
- b. To examine the influence of subjective norm on the adoption of the mobile phone billing system among customers of government institution services in Tanzania.

- c. To investigate the influence of perceived behavior on the adoption of the mobile phone billing system among Customers of government institution services in Tanzania

## **2. Literature Review**

### **2.1 Theoretical Literature Review**

The Planned Behavioral Theory, as detailed below, guided the current study.

#### **Theory of Planned Behaviour**

Ajzen (1991) coined the phrase "theory of planned behavior" to describe the theory of reasoned action that he constructed by including the construct perceived behavioral control as a determinant of behavioral intention and behavior in the model. According to Ajzen (1991), the theory of planned behavior states that three variables determine an individual's behavioral intention to behave and these include: attitude, subjective norms, and perceived behavior control. Ajzen (1991) defined attitude as the general individual feeling about the desirability or undesirability of a particular issue or behavior. Subjective norm refers to individual's perception of important people's opinions about doing or not doing the behavior. In other words, subjective norm refers to perceptions related to societal inclination as whether an individual should or shouldn't act in a particular way (Taylor & Todd, 1995). The term "perceived control of behavior" refers to an individual's perceptions of the ease or difficulty of performing a behavior, as well as the skills, resources, and opportunities required to perform the behavior (Ajzen, 1991). As a result, in this study, this theory aided the researcher in better understanding the impact of attitude, subjective norm, and behavioral control on the adoption of mobile billing among government institution clients.

### **2.2 Empirical Literature Review**

#### **2.3.1 Attitude towards the adoption of the Mobile phone Billing System Among Customers of Government Institution Services in Tanzania**

In India, Amit Shankar and Biplab Datta (2018) found that perceived ease of use (PEOU), perceived usefulness (PU), trust, and self-efficacy (SE) have a significant positive impact on M-payment adoption intention in their study of actors affecting mobile payment adoption intention from an Indian perspective. Subjective norms (SN) and personal inventiveness (PI), on the other hand, had no influence on M-payment adoption intentions.

Kabir (2013) conducted a study in Bangladesh on factors impacting the use of mobile banking from a developing country's perspective. The data accrued was evaluated using multiple regressions, revealing four major components. Under the themes of Perceived Risk, Trust, Convenience, and Relative Advantage, various other elements were investigated. Performance risk, security/privacy risk, time risk, social risk, and financial risk were

negatively related to mobile banking usage, as perceived risk was associated to respondents' feelings of insecurity when using mobile banking, whereas ability, integrity, benevolence, perceived usefulness, perceived ease of use relative cost, and time advantages were positively related to the intention to use mobile banking services. Social security, on the other hand, was the sole inconsequential component.

### **2.2.2 The influence of Perceived Behaviour Control on the Adoption of the Mobile Phone Billing System among Customers of Government Institution Services in Tanzania**

Govender & Sihlali (2014) used the Extended TAM theory to conduct a study on mobile banking adoption among government institution clients in Zimbabwe. According to the findings of the multiple regression analysis, independent social influence may account for 42 % of the explanatory power for the dependent variable, intention to use m-banking. Chitungo & Munongo's (2013) revealed that social norms have a substantial impact on user intention toward mobile banking. The findings may provide more insights into mobile banking strategies for mobile network operators, banks, and software developers as they build and execute mobile banking services in Zimbabwe.

#### **2.2.3 Subjective Norm Adoption of Mobile Phone Billing System Among Customers of Government Institution Services in Tanzania**

Subjective norms refer to the expectation that a significant individual or group of individuals will approve and support a given conduct. Subjective norms are defined by an individual's motivation to conform with others' views and their perception of social pressure from others to behave in a specific way. 2015 (Marija Ham).

Momani & Abualkishik (2014) conducted a study in Oman to determine the factors that influence customers' willingness to adopt mobile blackboards. Performance expectancy was found to be the most consistent theme in studies of M-blackboard or M-learning adoption, followed by effort expectancy, self-management, enabling conditions, perceived playfulness, cost, and past experiences. In Tanzania, Swai (2015) found that social influence was the most significant variable, followed by price value and performance expectancy, in his study of Factors impacting customers' adoption and actual use of mobile phone payment services in Tanzania. On the other hand, customers' behavioral intention to use mobile phone payment services was found to be unaffected by effort expectancy. Furthermore, users' behavioral intentions had no bearing on the actual use of mobile phone services.

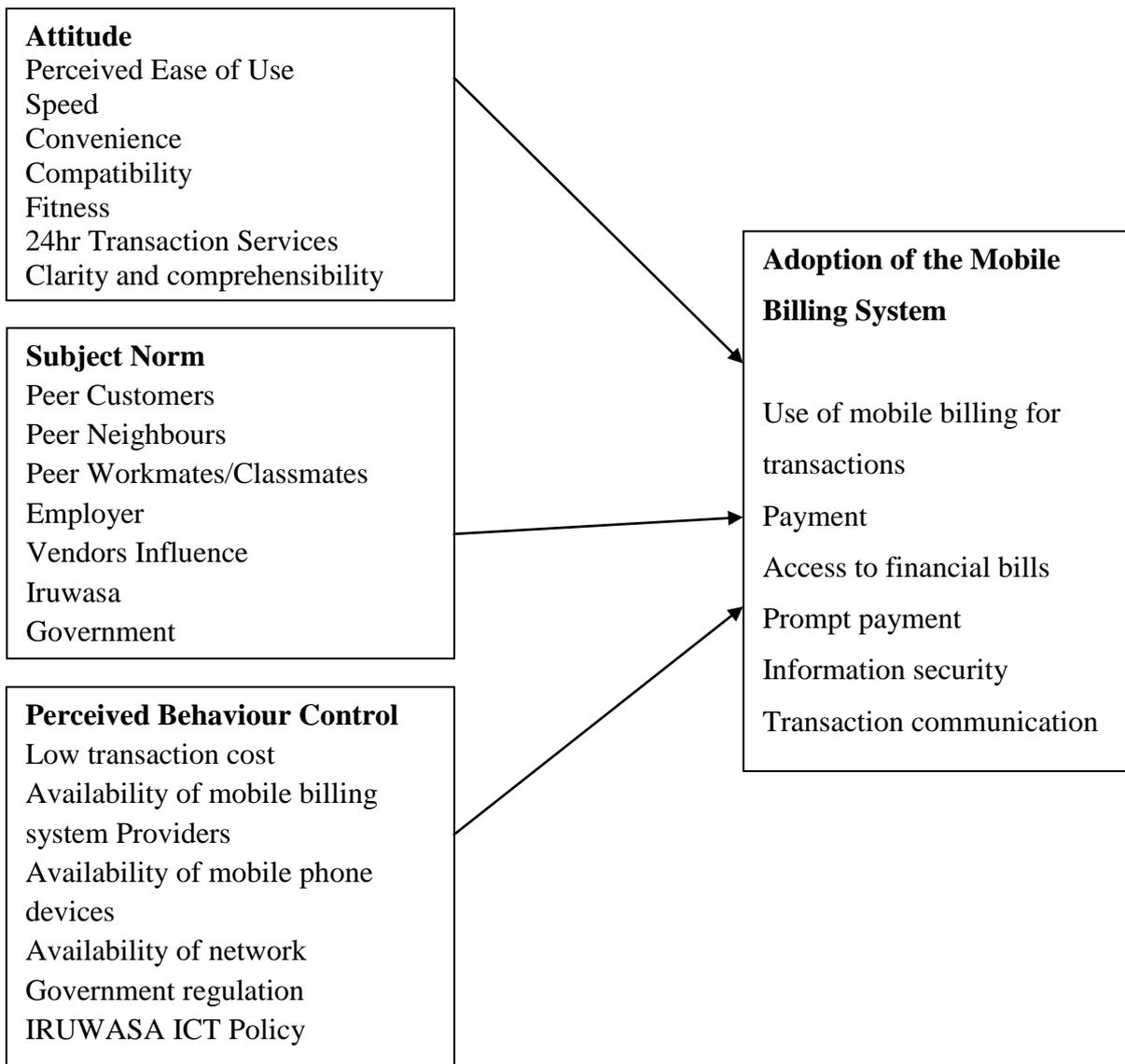
Chitungo & Munongo (2013), on their mobile banking adoption studies, the findings indicate perceived risks and costs deterred the adoption of the service. The results may provide further insights into mobile banking strategies for mobile network operators, banks and software engineers to design and implement mobile banking services to yield higher acceptance amongst of mobile banking in Zimbabwe. In their study of Variables Influencing Customers' Intention to Embrace Mobile Blackboard, Momani & Abualkishik (2014) discovered that

conducive conditions such as cost and past experiences influence government institution customers' intention to the adopt Mobile Blackboard.

### 2.5 Conceptual Framework

The conceptual framework below portrays the intricate relationship between the independent variables (attitude, subjective norm, and perceived behavior control) and behavioral intention to use the mobile billing system which was regarded as the dependent variable in the current study

**Fig 2.1 Conceptual Framework: The Influence of Behavioral Intention on the Adoption of the Mobile Phone Billing System**



**Source:** Synthesized from literature reviewed (2021)

## **2.6 Hypotheses Formulation**

Using the above conceptual framework, hypotheses were formulated as follows:

**H<sub>1</sub>:** Attitude has an influence on government institution service customers' intention to adopt the mobile billing system

**H<sub>2</sub>:** Subjective norm has an influence on government institution service customers' intention to adopt the mobile billing system

**H<sub>3</sub>:** Perceived behavior has an influence on government institutions customers' intention to adopt the mobile billing system.

## **3. Methodology**

The positivist paradigm was applied in this investigation and the research philosophy asserts the presence of true and objective reality that can be investigated using empirical facts and theory as the foundation. Thus, the relevance of the positivist paradigm in the current study was validated since it allowed the researcher to grasp reality and learn about the mobile phone billing system using existing theory and empirical data. The positivist paradigm was used to examine if attitude, subjective norms, and perceived behavior control have an impact on the adoption of mobile phone billing systems among users of government institution services in Tanzania.

The quantitative approach was used to test the hypothesis stipulated on the factors that influence the adoption of mobile phone billing systems among customers of government institution services in Tanzania. This allowed the researcher to assess the impact of perceived attitude, subjective norms, and perceived behavior control on the adoption of mobile phone billing system services among government institution service consumers.

Both explanatory and descriptive research designs were used in this study. The study's characteristics were profiled using a descriptive research design. This research was carried out at IRUWASA in the Iringa Municipality. This institution was selected since it was one of the government institutions with a large number of clientele who have an experience with using mobile phone billing system services. As a result, gathering data from them aided the researcher in mobilizing evidence and obtaining the information needed to comprehend the elements impacting the adoption of mobile phone billing system services in Tanzanian government entities.

stratified sampling was used to obtain consumer responses from several wards in Iringa, while proportional stratified sampling was used to achieve a fair representation of responders throughout the designated wards. Finally, basic random selection was used to choose survey respondents from various strata. The sample size for several wards in the Iringa municipality is as shown in Table 3.1 below.

**Table 3.1: Sample Size Distribution per Iringa Municipality wards**

Area	Population	Sample size
Iringa A	175	93
Iringa B	124	66
Iringa C	51	27
<b>Total</b>	<b>350</b>	<b>186</b>

**Key:**

**Iringa A:** Comprises of the following wards: Mtwivila, Mkimbizi, Kihesa, Gangilonga and Wilolesi

**Iringa B:** Comprises of the following wards: Ipogolo, Igumbilo, Ndiuka and Kitwiru

**Iringa C:** Comprises of the following wards: Mawelewele, Frelimo, Isakalilo, and Kalenga

According to a sample size formula recommended by Kothari (2009), and with a target population (N) of 350, the sample size was 186 respondents, following the computation below:

$$n = \frac{350}{0.05^2(350)+1} = 186$$

The data for the study was gathered through a questionnaire. To examine the amount or magnitude of each element influencing government consumers' adoption of mobile phone billing system services, quantitative data analysis was performed using multiple regression analysis and correlation analysis. The data for the study was gathered through a questionnaire. To examine the amount or magnitude of each element influencing government consumers' adoption of mobile phone billing system services, quantitative data analysis was performed using multiple regression analysis and correlation analysis.

#### **4. Data Analysis, Interpretation and discussion of Findings**

##### **4.1 Reliability**

In scientific study, Cronbach alpha coefficients of 0.6 and above are regarded significant and more accepted, while lesser values can be used and accepted as well (Hair et al,2003). The value of the Cronbach's alpha coefficient for the indicator variables utilized in this investigation is shown in Table 4.1. Because the p-values were above 0.6, it suggests that the items employed measured what they purported to measure, and hence the data was credible due to the measures' internal consistency.

**Table 4.1: Reliability Test**

<b>Variables</b>	<b>No of Items</b>	<b>Items</b>	<b>Cronbach's Alpha</b>
Customer attitudes	8	Ease to use, convenient, fast,24 hours services access, compatibility, user compatibility, easy to learn, open and understandable	0.859
Subjective norm	7	Peers, friends, neighbors, workmates/ classmates, IRUWASA support, government support, mobile phone billing system providers, employer,	0.652
Perceived behavior control	7	Government policy, mobile phone network operators' availability, ease of access, mobile phone gadget availability, low cost of access, mobile phone network agents, IRUWASA policy	0.795
Customer mobile billing adoption	6	Used; to pay water bills, to pay other government bills, prompt payments, secure information, communicate transactions, receive water bills	0.649

**Source:** Field data, (2021)

**4.2 Validity**

The researcher discovered a sample sufficiency index of 0.598 or 59.8 percent in table 4.2, which compares the sizes of the observed correlation coefficients to the sizes of the partial correlation coefficients for the total of analysis variables. It is valid because it is greater than 0.5 or 50%, which is the cut-off. Furthermore, the second acceptance of factor analysis is satisfactory because the hypothesis test of sphericity by the Bartlett test (Ho: All correlation coefficients are not sufficiently distant from zero) is denied at a level of statistical significance of p0.0005 for Approx. (Golafashani,2003).

**Table 4.2: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.598
Bartlett's Test of Sphericity	Approx. Chi-Square	4164.824
	Df	595
	Sig.	.000

**Source:** Field data, (2021)

## 5. Study Findings

### 4.1 The Influence of Attitude on the Adoption of the Mobile Phone Billing System Among Customers of Government Institution Services in Tanzania.

The study's first objective was to determine the impact of attitude on the adoption of the mobile billing system among clients of government services. The following discoveries were made upon conducting the correlation and regression analysis.

**Table 4.3: Correlation between Attitude and Adoption**

		Attitude	Adoption
<b>Attitude</b>	Pearson Correlation	1	.446**
	Sig. (2-tailed)		.000
	N	186	186
<b>Adoption</b>	Pearson Correlation	.446**	1
	Sig. (2-tailed)	.000	
	N	186	186

Source: Field data, (2021)

\*\* . Correlation is significant at the 0.01 level (2-tailed).

As presented on table number 4.3 above; the relationship between attitude and mobile billing system adoption was strong since  $r$  was 0.446\*\* which falls within the significance region ( $0.00 > r \leq 0.49$ ) as presented by two stars (asterisk) implying a strong relationship between attitude and adoption of mobile billing system. Therefore, the researcher rejected the null ( $H_0$ ) hypothesis and accepted the alternative ( $H_1$ ) that states that Attitude is a behavioral intention factor influencing government institution service customers to adopt the mobile billing system.

**Table 4.4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.576 <sup>a</sup>	.332	.301	2.98433

Source: Field data, (2021)

- a. Predictors: (Constant), open and understandable, fast, convenient, easy to learn, 24hours service access, ease of use and compatibility, go well with users.

The results in table 4.4 show that the dependent variable "adoption of mobile billing system" is well explained by the independent variable "customer attitude" which has eight indicator variables namely; open and understandable, faster, convenient, easy to learn, 24 hours services access, easy to use, compatibility, and go well with users" to a minimal extent, as evidenced by the  $R^2$  of 33.2%, which is a low percentage.

**Table 4.5: ANOVA - Attitude towards the Adoption of the Mobile Billing System**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	782.230	8	97.779	10.979	.000 <sup>b</sup>
Residual	1576.399	177	8.906		
Total	2358.629	185			

Source: Field data, (2021)

- a. Dependent variable: customers mobile phone billing system adoption
- b. Predictors: (constant), open and understandable, faster, convenient, easy to learn, 24hours services access, easy to use, compatibility, go well with users

As evidenced by the p-value 0.000 in the ANOVA table 4.5 above, the model used in this study statistically significantly predicts the outcome variable of the link between the dependent variable "adoption" and the independent variable "consumer attitudes" to a large extent. This means that the general premise, that attitude is a behavioral intention factor influencing government institution service customers' adoption of the mobile billing system, is accurate. These findings support Ajzen's (1991), who termed attitude as people's general feelings about the desirable or undesirable nature of a given issue or conduct. Further analysis of the individual indicators predicting the adoption of mobile billing services is as presented in table 4.6 below:

**Table 4.6: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(constant)	12.663	2.038		6.214	.000
	easy to use	.981	.352	.230	2.784	.005
	faster	-.891	.457	-.151	-1.950	.040
	convenient	.017	.279	.004	.060	.952
	go well with users	-.287	.476	-.060	-.602	.548
	24 hours services access	-.344	.318	-.090	-1.082	.281
	Compatibility	.437	.358	.114	1.223	.223
	easy to learn	1.875	.366	.416	5.120	.000
	open and understandable	.787	.435	.146	1.811	.042

Source: Field data, (2021)

- a. dependent variable: customers mobile phone billing system adoption

Coefficients results in Table 4.12 revealed that four of the eight indicators were statistically significant at the 0.05 confidence level. Statistically significant coefficients have p-values(sig) less than alpha 0.05.

### 5.2 The influence of subjective norm on the adoption of the mobile phone billing system among government institution services customers in Tanzania

The study's second objective was to determine the impact of subjective norms on the adoption of mobile billing among clients of government institution services. The following discoveries were made upon conducting correlation and regression analysis:

**Table 4.7 Correlation between Subjective Norm and Adoption of Mobile Billing**

		Aadoption	Ssubjective norm
Adoption	Pearson Correlation	1	.467**
	Sig. (2-tailed)		.000
	N	186	186
Subjective norm	Pearson Correlation	.467**	1
	Sig. (2-tailed)	.000	
	N	186	186

**Source:** Field data, (2021)

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The researcher rejected the null (H0) hypothesis and accepted the alternative (H2) hypothesis, as shown in table 4.7. The subjective norm is a behavioral intention component that influences government institution service customers to use mobile billing. As a result, the link between subjective norm and mobile billing system adoption is strong, as r is 0.467\*\*, which falls within the significant zone ( $0.00 > r > 0.49$ ), as shown by two stars (asterisk), indicating a strong relationship between the variables. The results of multiple regression are provided in the three tables below.

**Table 4.8: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724 <sup>a</sup>	.524	.505	2.51105

**Source:** Field data, (2021)

a. Predictors: (Constant), fellow colleagues, IRUWASA support, neighbors influence, peer influence, government support, mobile phone network agents, employer influence.

According to the data in table 4.8, the dependent variable "adoption of mobile money" is well explained by the independent variable subjective norm, which has seven indicators: "fellow colleagues, IRUWASA support, neighbors influence, peer influence, government support, mobile phone network agents, and employer influence" to a large extent, as evidenced by the high R square of 52.4 %.

**Table 4.9: ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1236.275	7	176.611	28.010	.000 <sup>b</sup>
Residual	1122.354	178	6.305		
Total	2358.629	185			

**Source:** Field data, (2021)

a. dependent variable: customers mobile phone billing system adoption

b. predictors: (constant), colleagues, IRUWASA support, neighbors influence, peer influence, government support, mobile phone network agents, employer influence

Overall, the model used in this study statistically significantly predicted the outcome variable of the link between the dependent variable "adoption" and the independent variable "customers subjective norms" to a large extent, as evidenced by the p-value of 0.00 in the ANOVA table above. This demonstrates that the underlying proposition, that perceived customer behavior has a significant influence on customers' adoption of mobile billing, is valid. This study backs up Ajzen's (1991) theory of planned behavior, which proposed that an individual's perception of important people's opinions about doing or not doing a behavior could influence behavior intention to embrace technology. Similarly, Taylor and Todd (1995) defined subjective norm as a perception tied to societal attitudes about whether or not an individual should engage in particular conduct. The table below provides a more detailed study of the individual indicators for forecasting mobile billing service adoption.

**Table 4.10: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.319	1.315		6.325	.000
	Peer Influence	.121	.280	.027	.432	.667
	Neighbors Influence	.028	.030	.052	.945	.346
	Iruwasa Support	1.550	.281	.394	5.526	.000
	Mobile Phone Network Agents	.352	.236	.099	1.496	.137
	Government Support	1.157	.226	.356	5.111	.000
	Employer Influence	-1.075	.285	-.329	-3.778	.000
	Fellow Colleagues	1.783	.319	.413	5.586	.000

**Source:** Field data (2021)

a. Dependent Variable: Customers mobile phone billing system adoption

The results provided in table 4.10 Coefficients above showed that out of seven indicators only four indicators were significant at 0.05 confidence level.

#### 4.4.2 The influence of perceived behaviour control on the adoption of the mobile phone billing system among government institution services customers in Tanzania

The third objective of this research was to test the influence of perceived behavioral control on the adoption of the mobile billing system among government institution clients. The following revelations were made upon conducting the correlation and multiple regression analysis:

**Table 4.11: Correlation between Perceived Behavior Control and Adoption**

		Adoption	Perceived Behavior
Adoption	Pearson Correlation	1	.448**
	Sig. (2-Tailed)		.000
	N	186	186
Perceived Behavior	Pearson Correlation	.448**	1
	Sig. (2-Tailed)	.000	
	N	186	186

**Source:** Field data, (2021)

\*\*. Correlation Is Significant at the 0.01 level (2-Tailed).

The researcher rejected the null (H0) hypothesis and accepted the alternative (H2) hypothesis, as shown in table 4.11; hence, there is a strong association between perceived behavior and mobile billing adoption. As a result, the link between perceived behavior and mobile billing adoption is strong, as  $r$  is 0.448\*\*, which falls inside the significant zone ( $0.00 > r > 0.49$ ), as shown by two stars (asterisk), implying a strong relationship between the two variables.

This objective was created to explore the idea that there is a correlation between social perceived behavior control and mobile billing service adoption. The results of multiple regression are provided in the three tables below.

**Table 4.12: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.717 <sup>a</sup>	.514	.495	2.53767

- a. predictors: (constant), government policy, availability of network operators, easily available, availability of mobile phone gadget, cheap to access, mobile phone network agents, IRUWASA policy

The results in table 4.12 show that the dependent variable "adoption of mobile money" is well explained by the independent variable perceived behavior control, which has seven indicators namely: government policy, availability of network operators, easily available, availability of mobile phone gadget, cheap to access, mobile phone network agents, and IRUWASA policy to a large extent, as evidenced by the R square of 51.4 %, which is a high percentage.

**Table 4.13: ANOVAa**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1212.349	7	173.193	26.894	.000 <sup>b</sup>
Residual	1146.280	178	6.440		
Total	2358.629	185			

**Source:** Field data, (2021)

- a. dependent variable: customers mobile phone billing system adoption
- b. predictors: (constant), government policy, availability of network operators, easily available, availability of mobile phone gadget, cheap to access, mobile phone network agents, Iruwasa policy.

As shown by the p-value of 0.00, which is less than 0.05 in the ANOVA table 4.13 above, the model used in this study statistically significantly predicted the outcome variable of the relationship between the dependent variable "adoption" and the independent variable "perceived behavior control" to a large extent. This indicates that the primary assumption, which states that customers' perceptions of behavior control have a strong influence on their adoption of mobile billing systems, is accepted. These findings support Ajzen (1991), who suggested that an individual's impression of the ease or difficulty of performing a behavior shows the individual's judgments of the skills, resources, and opportunities required to adopt a specific technology.

The table below provides a more detailed study of the individual indicators for forecasting mobile billing service adoption:

**Table 4.14: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.923	1.416		7.007	.000
	Cheap to Access	-.189	.247	-.052	-.764	.446
	Easily Available	1.051	.294	.206	3.577	.000
	Availability of Network Operators	.229	.259	.052	.882	.379

Availability of Mobile Phone Gadget	-.331	.232	-.089	-1.426	.156
Mobile Phone Network Agents	.928	.240	.262	3.863	.000
IRUWASA Policy	.826	.261	.254	3.161	.002
Government Policy	1.028	.252	.303	4.077	.000

**Source:** Field data, (2021)

a. dependent variable: customers mobile phone billing system adoption

The results provided in table 4.14 Coefficients above showed that out of seven indicators only four indicators were significant at 0.05 confidence level.

## 5. Implications of Findings

### 5.1 Implication to government services customers

The study discovered that users prefer mobile billing services because they are quick, easy to use, clear, and understandable, and they are available 24 hours a day. This implies that when government consumers use mobile billing services, they will be able to access financial services and pay their bills 24 hours a day, allowing them to continue to enjoy the services and goods provided by the government.

### 5.2 IRUWASA and the Government

The findings of this study will benefit government institutions, particularly IRUWASA, as findings provide valuable knowledge for using mobile billing technology in such institutions. Study findings will further contribute to the improvement of government service delivery.

This research will be useful in determining the function of mobile phone billing systems in improving government clients' financial transactions while reducing costs and time. As a result, the findings of the study will contribute to new knowledge in this field and will serve as a data source for policy and decision-making on issues of open-source software, access to its services, and utilization at a national level.

### 5.3 Academics and Researchers

The framework for this research was created using a modified theory of planned conduct developed in Western culture. Both the perceived behavior control, subjective norm, and customer attitudes constructs of the theory of planned behavior were found to have a substantial predictive power on government consumers' uptake of mobile billing services. These implies that any theory produced in one setting and modified in another can be applied in a new situation. As a result, these data will be used to inform future research studies that provide evidence in the same context.

### 5.4 The Society

The results of this study will benefit the general public by providing relevant and helpful information on mobile billing services. For example, sim card suppliers will benefit from selling sim cards to government clients because they will be required to be connected in order to use mobile phone billing services. this study will also benefit mobile phone gadget vendors since users require a mobile phone to transact utilizing mobile billing services.

## **6. Recommendations for action**

### **6.1 The influence of attitude on the adoption of mobile billing services among Government customers**

Customers' attitudes were revealed to be a key behavioral intention element impacting Government customers' adoption of mobile billing services in Tanzania in this specific objective. It is suggested that mobile phone providers and banks build mobile billing systems that are simpler and more convenient for customers based on these findings. Customers in the government will be more inclined to use mobile billing services as a result of this. On the other hand, the government, banks, and mobile phone carriers should collaborate to create a mobile billing system that is interoperable.

### **6.2 The influence of subjective norm on the adoption of mobile billing services among Government customers**

According to current study findings, subjective norm had a significant impact on government consumers' adoption of mobile billing services in Tanzania. To increase the use of mobile billing services in government institutions therefore, this study recommends that service providers expand their services to a wider range of people in society in order to attract more customers, which will in turn exert pressure on customers to persuade others, such as friends, neighbours, co-workers, and employees, to use the system. This will encourage more government clients to use the mobile billing system.

### **6.3 The influence of perceived behaviour control on the adoption of mobile billing services among Government customers**

Perceived behavior control was discovered to be one of the factors that strongly influence the adoption of mobile billing services among government customers in this study. It is therefore recommended that IRUWASA and mobile billing vendors create conducive facilities, such as low-cost mobile devices and low-cost transaction costs, to boost the adoption of mobile billing system services. It is also proposed that mobile phone providers upgrade and stabilize their networks to ease use and adoption of government services.

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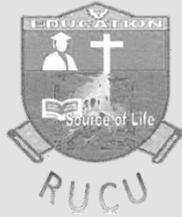
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## **Examination of the Influence of Employee Behavior Intention on Electronic Government System Adoption in Tanzania: A Case of Traffic Management System (TMS) Iringa Municipality Police Force**

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### **Abstract**

*This study analyzed the influence of employee behavior intentions on the adoption of electronic government systems in Tanzania, using the Traffic Management System (TMS) in the police force in Iringa Municipality as a case study. The study's particular objectives were to i) Examine the influence of employee attitude on Iringa Municipality's traffic management system; ii) examine the influence of subjective norms on Iringa Municipality's traffic management system, and iii) To examine the influence of perceived behavior control on Iringa Municipality's traffic management system. The study employed quantitative research methods where the survey design was used. Data that informed the current study was accrued from the Iringa municipality police force and although the targeted sample size of the study was 118 respondents, only 109 respondents completed the questionnaire, and respondents were recruited using the simple random sampling technique. Data were descriptively analyzed using correlation and multiple regressions, allowing the researcher to test the hypothesis and determine the cause-and-effect link. The study's findings show that employees' attitudes have a significant influence on the implementation of traffic management systems in Iringa Municipality. Similarly, study findings demonstrated that subjective norms in traffic control systems have a significant favorable influence. In addition, the findings show that perceived behavior control has a significant positive impact on the adoption of traffic management systems in the Iringa Municipality. According to the findings, elements of employee attitudes, subjective norms, and perceived behavior control that have a minor impact on TMS adoption should be eliminated, while those with significant positive impacts should be boosted to promote TMS adoption. Other studies should be undertaken to investigate variables that lead to an insignificant association between a few elements of employee attitudes, subjective norms, and perceived behavior control, which was found inconsequential on TMS adoptions, according to the study. Because no moderating variables were considered in this study, the researcher advocates that future scholar analyze the impact of moderating variables in prospective TMS studies. Finally, it is recommended that future studies focus on other geographical contexts.*

**Key words:** Employee Behavior Intention, Electronic Government System Adoption, Traffic Management System (TMS), Police Force

## **1. Introduction**

Today, the world is undergoing tremendous technological reevaluation, with information technology playing a key role. There is a general belief that information technology eases and tremendously contributes to sustainable life (Nunn and Quinet, 2002). Meanwhile, Tanzania's Internet users have rapidly surged for instance in 2018, 25% of Tanzanians admitted to using the Internet on a regular basis (Alawadhi and Morris, 2018). (2015). Tanzania's Internet user statistics were recorded at an all-time high of 14.72 million in 2020, according to Internet World Stats (Internet World Stats, 2020). Computer use efficacy has improved as a result of the adoption of Internet technology, showing that users have developed the ability to obtain and retain information from their use of the Internet.

The phrase "e-government" refers to the government's use of information technology. E-Government entails the use of electronic means to deliver government information and services to citizens promptly and correctly, at low cost and with little effort, at any time and through a single website on the Internet. E-Government, also a broad initiative, aims to improve government efficiency and effectiveness by improving the performance of services for beneficiaries such as individuals, institutions, businesses, and society in general (Almarabeh and AbuAli, (2010).

E-government, according to AlAwadhi and Morris (2015), contributes to the operation of government-to-citizens (G2C), government-to-business (G2B), government-to-government (G2G), internal efficiency and effectiveness (IEE), and government-to-employees (G2E) (2015). For the purposes of this study, the researcher will focus on the E-Government service provided to employees. G2E is an E-Government category that encompasses actions and services that take place between government agencies and their workers (Efrain and David, 2012). Governments employ a big workforce and as a result, governments are just as eager as private-sector companies in offering services and information to their employees via electronic means. Because state government employees frequently operate in a number of locations, G2E software may be very useful in facilitating efficient communication. While internal programs such as E-payroll, E-records management, E-training, Enterprise case management, integrated acquisition, integrated human resources, and one-stop recruiting provide instruments for increasing the efficacy and efficiency of government operations

The government's goal in introducing e-government services to public sector employees was to improve internal efficiency and effectiveness for processes and procedures within the government sector by (a) Improving the level of efficiency in the use and application of information technology (b) Constructing the electronic transformation of government agencies both internally and externally; and (c) Reducing the time spent performing procedures, (d) Taking advantage of the best experiences in the performance of the business ; (e) Accurately complete various functions and (e) Facilitating the electronic payment system.

According to the conclusions of the URT (2013) survey, all of the ministry departments visited recognize the importance of e-Government. Many departments have expressed a strong desire to employ information and communication technology (ICT) to modernize

administrative processes and improve service delivery. Although most have stated support for the vision of e-Government, only a few MDAs/LGAs are actively creating their ICT strategy/plan due to a lack of competence. They have also stated that public sector executives must show stronger commitment to e-Government because the shift will necessitate a strong mandate and sound investments. While some progress has been made in recent years, most MDAs and LGAs believe that e-Government efforts need to be better integrated and coordinated across the public sector to avoid slow implementation and resource wastage. According to the article, present levels of human capital and ICT capacity are insufficient to have a substantial impact. To promote the innovative use of ICT, ICT units in MDAs/LGAs and across the public sector require both sophisticated technical and business management skills. As a result, there is little trust in the use of ICT to provide electronic services. Many MDA websites exist, and the bulk of them are still in the e-Government presence stage. They primarily provide information about organizations and the services they offer. There are only a few initiatives that provide a single gateway for internal government operations and services. Governments in advanced countries such as Sweden, Norway, the United Kingdom, and Japan have used information systems to facilitate service functions. The use of information systems, particularly in the public sector, enhances not only road safety but also efficiency, transparency, and accountability in providing services to the public, reducing corruption (Mkude, 2016). The use of an information system can improve public service delivery by streamlining internal processes and expanding the capacities of public agencies, particularly law enforcement (Alshehri and Drew, 2010). Information systems are steadily gaining prominence as part of modern businesses' circuitry, dictating how challenges are defined and progress is quantified. They frequently assist in determining the work completion process, who executes it, and the job description. The Tanzania government facilitates public sector employment, particularly in the Police Force. The Traffic Management System (TMS), which was implemented in 2015, is the most widely utilized system. TMSs have three main phases: (1) information gathering, which is responsible for collecting traffic-related data from a variety of sources; (2) information processing, which is responsible for aggregating and processing the received traffic data in order to identify additional traffic requirements that may be required to improve traffic efficiency; and (3) service delivery, which is responsible for providing services to control traffic requirements and related solutions to improve overall traffic efficiency thus, TMS has gained global recognition. TMS is a robust smartphone application that keeps track of all traffic violations across the city (XIAO, 2015). The application aids traffic officers in keeping accurate records of all traffic offenses committed by road users, as well as maintaining databases of driver and vehicle information (AlAwadhi and Morris, 2010). (2015).

The objectives of the TMS are as follows; To design and deliver a secure database for storing data, entered into the system; To design and deliver an API system with the following functionalities: an administrator to oversee all the actions of the field officers; and accountant profile that will be collecting the fines; addition of fines with time deadlines; view pending and overdue fines; view how much money has been collected over a specific period.

Despite the well-known benefits of implementing Information Systems in the public sector, governments continue to face substantial hurdles in adopting Information System innovation into their processes. The process of accessing and utilising data from multiple sources is inherent in the nature of the services provided by public entities. In this regard, the implementation of an information system in the public sector must consider the activities involved. Otherwise, the anticipated benefits and consequences may not be realized, resulting in a waste of money, resources, and effort.

Several theories attempt to describe the adoption of Information Systems in the public sector from a theoretical standpoint. Diffusion of Innovation (Rogers, 2003) and the Decomposed Theory of Planned Behavior are two examples (Shareef et al., 2013). These theories specify the factors that influence the adoption and implementation of information systems. Various studies show that concerns such as a fragile environment, insufficient infrastructure, and a high illiteracy rate are the major blocks to the adoption of information systems in the public sector. Morris and AlAwadhi (2015). Poor skills, poor Information System policy implementation, lack of vision and strategy, lack of government support, lack of donor support, behavior alimentations, and national culture, i.e. leadership style bureaucracy, have all been mentioned as barriers to Information System adoption in other studies (Alam& Noor, 2009; Busagala and Ringo, 2013). Proposals for addressing these challenges have also been thoroughly reported in existing literature.

Employees' behavior intentions are thought to influence electronic system acceptance, according to Ajzen (1985). Employee attitudes, subjective norms, and perceived employee control, which are variables in the deconstructed theory of planned behavior, are all involved in this activity. The significance of the major construct of the deconstructed theory of planned behavior in terms of impact, association, and conclusion for influencing the adoption of electronic government systems is still debatable and requires further investigation. As a result, this study is expected to fill the vacuum by evaluating the impact of employees' behavior intentions on the adoption of electronic government systems through its structures.

## 1.1 Research Objectives

### 1.1.1 General Objective

The primary objective of this study was to examine the influence of employee behavior intentions on the adoption of electronic government systems in Tanzania, with the traffic management system in the police force in Iringa Municipality serving as a case study.

### 1.1.2 Specific Objectives

To achieve the general objective above, the following specific objectives were developed.

- i. To examine the influence of employee attitude on traffic management system adoption.
- ii. To examine the influence of subjective norms on traffic management system adoption.
- iii. To examine the influence of perceived behavior control on traffic management system adoption.

## 1.2 Scope of the Study

The study's scope is limited to Tanzania's traffic police force, as attributed to the sector's use of an electronic government system to enhance public services provision. The police force's

main functions are to oversee and preserve peace and security; thus by utilizing an electronic government system, the police force may streamline their job while providing effective and efficient services. The police force in Iringa Municipal was selected as a case study owing to time constraints. On the other hand, the study was guided by the Decomposed Theory of Planned Theory, which provides a theoretical scope in which three constructs were used to investigate Tanzania's adoption of electronic government systems.

## 2. Literature Review

Perceived behavior control in the context of this study is the control beliefs, which order perceived behavioral control. Is a power of one control factor which lead on the electronic movement system adoption (Enrique et al, 2017).

### 2.1 Theoretical Review

#### 2.1.1 Decomposed Theory of Planned Behaviour

Ajzen (1985) proposed the Theory of Planned Behavior to investigate the factors that influence the adoption of electronic government systems (TPB). The theory introduces the concept of human behavioral attitude and various beliefs, which finally lead to behavioral intentions and electronic system adoption. Shareef et al., (2013) later expanded the theory to become a decomposed theory of planned behavior (DTPB). Because most studies relevant to this theory have been undertaken outside of Tanzania, this study used the extended theory of planned behavior to investigate electronic government system adoption in Tanzania. The DTPB asserts that human conduct is influenced by one's attitudes and behavioral intents, which are characterized by the presence of social standards and the exercise of volitional control, as proposed by TPB and TRA. Morris and AlAwadhi (2015). Three dimensions are considered to impact electronic system adoption in the decomposed theory of planned behavior and these include; Employee attitude, subjective norms, and perceived behavioral control. The constructs are as broadly described hereunder:

**Employee's attitude:** The link between an individual's behaviors and the outcome that the behavior is expected to achieve or bring about is termed as behavioral beliefs. The behavioral ideas that a person holds will have a direct impact on his attitude toward an activity. If the projected outcome is positive, he will almost certainly have a positive attitude toward the activity, which will increase the possibility of actual performance. In essence, a person's behavioral views will center on the question of whether a conduct is positive or negative.

**Subjective norms:** If an individual's actions and behaviors are exclusively determined by him, forecasting his actions will be easy. That is not the case, however, because there are other internal and external forces at play. The major individuals or personalities in the individual's life, specifically their behavioral demands as he perceives them, are part of his normative beliefs. Furthermore, it is influenced in part by the value he attaches to these individuals' expectations. Together, these form the subjective norm that will influence his decisions on whether or not to behave in a given way (AlAwadhi and Morris, 2015).

**Perceived behavioral control:** One may perceive the presence of factors (called ‘control factors’) that will have an impact on behavioural performance. These are the control beliefs, which will dictate one’s perceived behavioral control. Each control factor can be examined separately, and opinions of the control element's influence may significantly vary. If there is a high probability that an influential control factor is present, one is likely to act in line with the power factor. Despite the importance of the decomposed theory of planned behavior and its attributes on electronic system adoption, limited research studies have focused on electronic government system adoption particularly in Tanzania’s police force. Although several studies suggest it’s significant in influencing electronic system adoption, few studies have broadly examined each construct’s influence on electronic government system adoption as recommended by Rana et al (2015).

## **2.2 Empirical Literature Review**

### **2.2.1 The Influence of Employee Attitude on Traffic Management System**

AlAwadhi and Morris, (2015) examined factors affecting the adoption of electronic government system. A mixed method approach was adopted in the study and in the qualitative phase, focus group discussions were used to obtain data on factors that affect the adoption of e-government services in Kuwait University. The Focus group data collection technique was used because detailed information about the user’s experience, opinions and feelings was required. In addition, students were invited to provide email addresses if they were interested in participating in a quantitative phase questionnaire survey. In total, 249 students participated in the quantitative phase, with two-thirds (165) being undergraduate students and one-third (84) being postgraduate students. Because university students are among the adult population for whom the Internet has become part of their daily routine, they were included in this study. The study's findings revealed that attitudes and perceptions had a positive impact on the adoption of electronic government services in Kuwait. Despite these findings, the study was conducted in Kuwait, which limits the extent to which findings can be generalized to the Tanzanian context.

In Saudi Arabia, Kagaari et al. (2010) conducted a study on student acceptance of mobile learning in higher education. According to the findings of a quantitative study, attitude has a significant impact on the acceptance and usage of various e-government mobile learning, services, and platforms. However, it must be determined whether it is a predictor of the adoption of computerized government systems. The attitude of employees has a significant impact on the electronic management system. Despite the significance of these findings, most studies on attitudes and electronic government adoption have been conducted in contexts other than the Tanzanian police force. This research contributed to a better understanding of the relationship between attitude and Tanzania's electronic government system.

### **2.2.2 The Influence of Subjective Norms on Traffic Management System.**

Subjective norms have been proven in studies to have a substantial impact on the adoption of electronic government systems. Yu (2012), for instance, conducted a study to analyze

the elements that influence consumers' intention to use mobile banking. To acquire data, a quantitative research approach was used, where data was accrued through a survey questionnaire. Findings revealed that subjective norms have a positive relationship with the government system, as was similarly established by Venkatesh et al., (2012).

Shareef et al. (2011) noted that the most significant challenges developing nations face in adopting and implementing e-government are variables connected to subjective standards, which should be investigated to understand how they affect electronic system acceptance. These researchers found it challenging to deploy an electronic system with desirable outcomes in poor nations due to fundamental social factors such as subjective standards not being well researched (Al-Zoubi et al. 2011). That indicates that once research into subjective norms well documented, a high level of acceptance and utilization of electronic systems can be achieved. Despite academic arguments about the effects of subjective standards on e-government adoption, there has been little expressed in the public sector of underdeveloped countries, notably in the police force sector, which requires further investigation. Subjective norms have a substantial positive influence on electronic management systems, according to the majority of empirical investigations undertaken outside of the African context (Chen and Dimitrova, 2006).

### **2.2.3 The Influence of Perceived Behaviour Control on Traffic Management System**

The impact of perceived behavior control on electronic government system adoption has been studied by a number of authors. Rana et al., (2015) for instance, studied citizen adoption of an electronic government system. According to the findings, perceived behavior control was found to be a predictor of progressive support for the current electronic system deployment. This theory argues that citizens' perceptions of behavior control influence their adoption of ICT systems in both the public and private sectors. Kagari et al. (2010) found that societal factors like perceived behavior control and personal attributes like anxiety have little impact on ICT system adoption. Furthermore, anxiety does not appear to be a predictor of intention to embrace and use new ICT systems. Scholars' perspectives however differ on the role of perceived behavior control in influencing electronic system adoption in both public and private organizations.

Similarly, Al-Sobhi (2009) analyzed the challenges facing the implementation of the e-government system in Saudi Arabia. According to his survey, hurdles to e-government services consumption included: resources, computer knowledge, authentication, usability, accessibility, and availability, with some of these being under perceived behavior control.

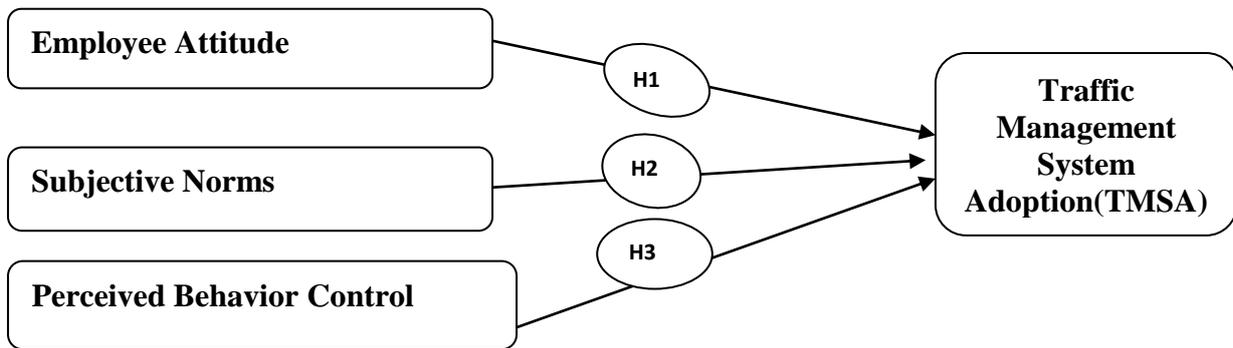
Apart from Tanzania, the majority of studies on perceived behavior control and electronic system adoption have been undertaken in other countries and show significant effects on electronic system adoption. However, few studies have been carried out in the Tanzanian context, notably those involving the police force, which have received little attention and resulted in the failure of electronic system implementation. In Tanzania, for instance, Kikwete (2014) stated that any transformative initiative required the adoption of an effective and efficient electronic government system, which could lead to the achievement of the National Strategy for Growth and Poverty Reduction (NSGPR), the National Vision 2025,

and the transition of the country from a low-income to a middle-income economy. The majority of experts believe that perceived behavior management has a considerable positive impact on the Traffic Management System.

### 2.3. Conceptual Framework

The conceptual framework consists of independent variables, which are constructs from the decomposed theory of planned behaviour, and a dependent variable, which is Tanzania's adoption of traffic management systems. Several studies have hypothesized that the constructs of the deconstructed theory of planned behaviour positively influence Traffic Management System adoption in Tanzania.

**Figure 2.1: Conceptual Framework**



Source: Researcher 2021

### 2.4. Formulation of Hypotheses

#### 2.4.1 Employees' Attitude (EA)

Employee attitude refers to a person's positive or negative feelings regarding activity, and it is an independent variable in this study. The strength of one's intention to act on behavior is measured by behavioral intention (Fishbein and Ajzen, 1975). Attitude is a major and positive predictor of behavioral intention, according to attitude research and technology acceptance research. In this study, employees' behavioral intentions to use e-government services are predicted using attitude. Accessibility, simplicity, perceived usefulness, Trust, competence, security, and confidence were utilized by Lau and Kwok (2015) to assess the impact of employees' attitudes on electronic system adoption. As a result, these measurements were used in this study to assess the impact of employee attitudes on the adoption of electronic government systems in Tanzania. The researcher hypothesized the following in order to investigate the association between employee attitude and TMS:

*H<sub>1</sub>: Employees' attitude has a significant positive influence on Traffic Managements System adoption.*

#### 2.4.2 Subjective Norms (SN)

In this study, subjective norms serve as an independent variable. Subjective norms influence the user's actions toward technology adoption, according to Venkatesh et al., (2003). According to Shareef et al., (2011): social influence, superior influence, top management, and

customer influence adoption intention. Little is however known about how these metrics are articulated in the Tanzanian context, particularly in the police force, in order to influence the use of electronic government systems. As a result, these measurements were used in this study to assess the impact of subjective norms on the adoption of electronic government systems in Tanzania. This study hypothesized that;

*H<sub>2</sub>: Subjective norms have a significant positive influence on Traffic Managements System adoption*

### **2.4.3 Perceived Behaviour Control (PBC)**

perceived behavior control connotes the extent to which a person believes that the presence of an organizational and technical infrastructure is for the purpose of supporting the use of a system. Perceived behavioral control is an independent variable in this research. To quantify the influence of perceived behavior control on electronic government system adoption, Kagaari et al. (2010) used network availability, facility availability, IT policy, availability of expertise, and availability of regulation. These metrics were used in this study to evaluate the influence of perceived behavior control on the adoption of electronic government systems in Tanzania and thus it is hypothesized that;

*H<sub>3</sub>: Perceived behavior control has a significant positive influence on Traffic Managements System adoption*

## **2.5 Traffic Management System Adoption (TMSA)**

The TMS adoption was measured using the following variables in this study. Existence of IT resources, IT training, service delivery, ease of monitoring, openness, electronic record keeping, increased fine collection, electronic directions, and online payments are all characteristics to be measured.

## **3. Methodology**

The deductive research approach was used in this study, which focuses on moving from theory to data and explaining the fundamental relationship between variables. According to Collins (2010), in the deduction technique, the notion is operationalized to allow facts to be quantified. What constitutes independent and dependent variables is well posited by the accepted indicators, based on the deduction research approach. This study used quantitative research methodologies and an explanatory research design to examine the hypothesis established with regard to the determinants of electronic government system adoption in Tanzania, with Iringa Municipality as a case study.

Kumar (2010) writes that explanatory research studies serve the primary goal of determining the causes and effects of variables' relationships. Explanatory research design is appropriate for this study because it includes both independent and dependent variables. The descriptive

research design, on the other hand, was utilized to identify and profile respondent characteristics. As a result, the research strategy in this study was a survey, with a sample drawn from the entire population. The study's target population was 180 police officers from Iringa Municipal. Employees of the Iringa Municipal Police Force were specifically targeted for the study. Using the Table of determining sample size, adopted from Krejcie and Morgan (1970), the sample size was 118 respondents, depending on 180 total employees from the police force who work with electronic systems in Iringa.

Data was collected using a survey questionnaire. A 5-point Likert scale was used to construct the survey questionnaire, which was pre-tested before being used to collect data to ensure adequate data quality. The reliability of the instruments was examined using Cronbach's alpha ( $\alpha$ ), and the validity was tested using exploratory factor by employing Total variance in the analysis phase. EFA test validity, according to Ramanathan (2008). The descriptive data analysis was used in the second phase of data analysis.

### **3.1 Validity and Reliability**

#### **3.1.1 Validity**

**Content Validity:** If the items on a test accurately reflect the theoretical field of the latent construct it claims to assess, it is said to be content valid (Morse, et al., 2002). To verify content validity, a pre-test of the survey instrument was undertaken in this study, which enabled researchers to ensure that the items on a given test appropriately reflected constructs.

**Construct Validity:** The greater the variation attributed to the constructs, the higher the validity of the instruments, according to statistical procedures. Total variance explained was examined to confirm construct validity, and the results revealed a score of 67.896 %, which is higher than 50%. As a result, the data gathered was accurate, as indicated in Table 3.1

Thus, four variables were retrieved from the questionnaire, each containing 26 indicator variables, and they explained 67.896 % variance. All the four factors had eigenvalues >1, which matched Kaiser's criterion, implying that all factors with eigenvalues greater than one are valid (Stuive, 2007), as shown in Figure 3.1 below.

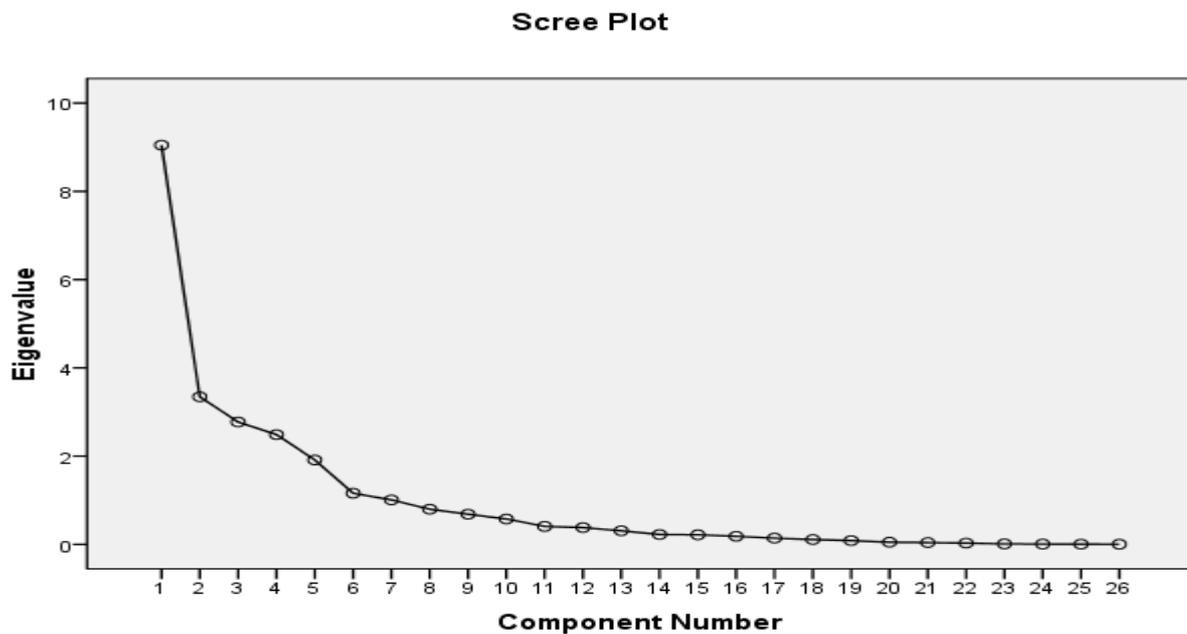
**Table 3.1: Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.048	34.798	34.798	9.048	34.798	34.798	6.016	23.137	23.137
2	3.344	12.863	47.661	3.344	12.863	47.661	4.718	18.148	41.285
3	2.773	10.664	58.326	2.773	10.664	58.326	3.679	14.149	55.434
4	2.488	9.570	67.896	2.488	9.570	67.896	3.240	12.462	67.896

Extraction Method: Principal Component Analysis.

Source: Researcher, (2021)

**Figure 3.1: Scree Plot**



Source: Researcher, (2021)

**Face validity:** To ensure face validity, each question or item on the scale must have a logical link to the objectives and hypothesis, according to Kumar (2010). To achieve face validity, the research instrument must represent the research aims, cover the complete range of topics to be measured, and be straightforward, specific, and short enough to meet all data collection standards.

**Criterion validity:** The data collection instrument was altered to fit the research variables and hypothesis in order to achieve criterion validity. In addition, the indicator variable is used to determine the major qualities by measuring the main construct in designed instruments.

### 3.1.2 Reliability

Cronbach's alpha ( $\alpha$ ) analysis was used to examine the predictor variables' reliability, and the range of Cronbach's coefficient was as reported in table 3.3 below. Internal consistency and homogeneity of groups of items and questionnaires can be determined using Cronbach's analysis (Crowther and Lancaster, 2008). Cronbach's coefficient findings revealed that the variables considered in the current study were trustworthy. coefficients ranged from 0.602 to 0.884, as shown in Table 3.3. According to Wu et al. (2012), trustworthy Cronbach's coefficients range between  $0.50 < \alpha \leq 0.90$  thus, the study's reliability was very strong.

**Table 3.2: Reliability Test**

<b>Variable</b>	<b>No of Item</b>	<b>Cronbach's Alpha (<math>\alpha</math>)</b>
Employee Attitude (EA)	7	0.884
Subjective Norms (SN)	5	0.602
Perceived Behaviour Control (PBC)	5	0.755
Traffic Management System Adoption (TMSA)	9	0.723

Source: Researcher (2021)

#### **4. Data Analysis, Interpretation and Discussion of Findings**

##### **4.1 Sample Characteristics**

The study's target sample size was 118 respondents, although only 109 filled out the questionnaire, which is a response rate of 92 percent and considered representative for making conclusions. The research examined the nature and characteristics of the respondents in the study area, in reference to sample distribution. This section presents the descriptive results.

##### **4.1.1 Respondents Distribution by Gender**

The respondents in this study were both male and female police officers from the Iringa Municipal Police Force. As shown in Table 4.1, 70 (64.2%) of the 109 respondents contacted were men, while 39 (35.8%) were women. Despite the fact that male respondents outnumbered female respondents, the proportionate of the % indicates that gender was represented in at least an equal proportion in the data collecting procedure, allowing data to be obtained for each gender cohort.

##### **4.1.2 Respondents Distribution by Age**

The age distribution of respondents who work as police officers in Iringa Municipal is shown in Table 4.2. 12 (11%) of the 109 respondents contacted were between the ages of 18 and 27, 40 (36.7%) were between the ages of 28 and 37, 43 (39.4%) were between the ages of 38 and 47, and 14 (12.8%) were over the age of 47. The majority of the responders are between the ages of 28 and 47. This group, which ranges in age from 28 to 47 years, is made up of hardworking employees.

##### **4.1.3 Respondents Distribution by Education Level**

The distribution of respondents by level of education is shown in Table 4.3. Among the 109 respondents contacted, 29 (26.6%) had secondary education and 14 (12.8%) had a certificate level of education. Furthermore, 26 (23.9%) of the respondents had a non-degree education credential, 28 (25.7%) had a bachelor's degree, and 12 (11%) had a postgraduate degree. According to the findings, the majority of those contacted were educated thus , employees from the Police Department with various levels of education and experience were approached for participation in this study. Because the majority of the employees contacted are educated and have considerable experience, the data collected is relevant for decision-making and justification of this study.

#### **4.1.4 Respondents Distribution by Work Experience**

The distribution of respondents by job experience is shown in Table 4.4. Among the 109 people contacted, 3 (2.8%) had 1-3 years of experience, 10 (9.2%) had 4-7 years of experience, 59 (54.1%) had 8-10 years of experience, and 37 (33.9%) had more than ten years of experience. According to the study's findings, the majority of respondents had four years of experience. Because experienced staff informed this investigation, the data accrued reflects the facts. This descriptive analysis further reveals that officers of various levels of expertise were involved and represented during data collection.

#### **4.2 Descriptive Statistics**

In this section descriptive results of independent and dependent variable have presented. The mean, standard deviation (SD), maximum and minimum values of variables have shown. Since the study used 5-point Likert scale ranging from 1 = strongly disagree (minimum) to 5= strongly agree (maximum) over a total of 109 observations (n = 109). The indicators which scored mean below 3 are termed as disagree while those scored above 3 are agreed. Field (2009) expounds that while the mean values represent the respondents' views on a given variable, the values of standard deviation (SD) indicate how well the mean represents the data. It indicates the spread of responses in data. The mean values of employee attitudes and subjective norms were above the scale's central axis (3 = moderate), and the standard deviation was less than one, indicating that the responses were satisfactory. As a result, while employee attitudes and subjective standards were well-received, the response to perceived behavior control was not, as the standard deviation was greater than one.

According to Field (2009), the higher the mean value, the more impacts and Acc SDs greater than zero and equal to or less than one indicates that responses are satisfactory. This means that usefulness received a score of 4.1835, competence a score of 4.0550, accessibility a score of 4.0275, and confidence a score of 4.0092 out of the seven parameters of employee attitudes. In addition, other traits such as simplicity, trust, security, and confidences were determined to have a score of 3.8624 or above. Top management support had a mean value of 4.0183, stakeholders influence had a mean value of 3.9908, customer acceptance had a mean value of 3.8807, superior influence had a mean value of 3.8349, and coworkers influence had a mean value of 3.8532 in terms of subjective normative qualities. Perceived behavior control, availability of IT knowledge, and availability of IT policy all scored 4.0183 mean values, while perceived behavior control scored 3.7798. Furthermore, the mean values for the POS machine were 2.9450, the network was 2.3670, and the presence of expertise was 2.6239. This section's mean score indicates that the higher the mean, the more impersonations on TMS adoption there are. In addition, as shown in Table 4.1, all TMS attributes exhibited mean values above standard.

**Table 4: 1 Descriptive Statistics**

Variable name	N	Min	Max	Mean	Std. Deviation
<b>Independent Variable</b>					
Accessibility	109	1.00	5.00	4.0275	.75103
Simplicity	109	1.00	5.00	3.9817	.86047
Usefulness	109	1.00	5.00	4.1835	.75969
Trust	109	1.00	5.00	3.9817	.81629
Competence	109	2.00	5.00	4.0550	.60606
Security	109	1.00	5.00	3.8624	.95712
Confidence	109	1.00	5.00	4.0092	.63092
Coworkers' influence	109	1.00	5.00	3.8532	.69156
Top management support	109	2.00	5.00	4.0183	.56078
Client acceptance	109	1.00	5.00	3.8807	.94990
Stakeholders influence	109	1.00	5.00	3.9908	.64543
Superior influence	109	1.00	5.00	3.8349	.85542
Availability of network	109	1.00	5.00	2.3670	1.13579
POS machines	109	1.00	5.00	2.9450	1.11251
Availability of IT policy	109	1.00	5.00	3.7798	.91649
Availability of expertise	109	1.00	5.00	2.6239	1.07831
Availability of IT knowledge	109	2.00	5.00	4.0183	.74513
<b>Dependent Variable</b>					
IT resources	109	1.00	5.00	2.5321	1.02351
IT training	109	1.00	5.00	3.2110	1.09775
Services delivery	109	1.00	5.00	4.0642	.67048
Simplified monitoring	109	2.00	5.00	4.0000	.66667
Openness	109	1.00	5.00	4.1284	.91389
Record keeping	109	1.00	5.00	4.3211	.88066
Increased fine	109	1.00	5.00	4.1376	.91760
Electronic directives	109	1.00	5.00	4.4128	.76025
Fine payments	109	1.00	5.00	4.3394	.95472

Source: Researcher, (2021)

### 4.3 Multivariate Analysis: Multiple Regression Analysis

#### 4.3.1 Influence of Employee Attitude on Traffic Management System Adoption

Following the discovery of the VIF, which was confirmed to be within the permissible range of less than 10, regression analysis was performed. EA1, EA2, EA3, EA4, and EA7 revealed a positive significant link with TMS, unlike EA5 and EA6. For instance, the influence of EA1 was ( $\beta = .842, p = .000$ ) which portrays a positive significant influence on TMS adoption since  $p$  value was less than 0.05. In addition, the value of EA2 was ( $\beta = .679, p = .000$ ) indicating a positive significant influence on TMS adoption because  $p$  values were

less than 0.05. However, EA5 had a value of ( $\beta = -.213, p = .107$ ) which demonstrates an insignificant relationship. Also EA6 had a value of ( $\beta = -.044, p = .678$ ) which indicates a negative insignificant association with TMS; therefore, these attributes do not influence the adoption of TMS and as further revealed, EA has a positive significant contribution to TMS adoption with (.701,  $p = .000$ ), as evidenced by the p value of less than 0.05. This implies that employee's attitude has positive and significant influence on TMS adoption as detailed in Table 4.2 below. The researchers recommend that items EA5 and EA6 should not be involved in TMS adoption owing to their insignificant contribution.

**Table 4.2: Influence of Employees Attitudes on Traffic Management System Adoption**

Variable	Standardized Coefficient	Sig
(Constant)	15.800	.000
Accessibility (EA1)	.842	.000
Simplicity (EA2)	.679	.000
Usefulness (EA3)	.322	.001
Trust (EA4)	.417	.004
Competence (EA5)	-.213	.107
Security (EA6)	-.044	.678
Confidence (EA7)	.330	.000
<b>Employee Attitude (EA)</b>	<b>.658</b>	<b>.000</b>

*Dependent Variable: TMSA*

Source: Researcher, 2021)

#### 4.3.2 Influence of Subjective Norms on Traffic Management System Adoption

The researcher anticipated that H2: Subjective norms have a positive a significant influence on traffic management system adoption. Multiple regression analysis was used to examine the above-mentioned hypothesis. The findings show a positive and significant association between subjective norms and the adoption of traffic management systems. The findings reveal that four subjective norms variables have a substantial impact on TMS adoption. SN1, SN3 and SN5 have a positive significant relationship with TMS while SN2 and SN4 had an insignificant relationship. Findings show that SN1 influence TMS adoption because ( $\beta = .679, p = .000$ ) which shows positive and significant influence on TMS adoption since *p value was less than 0.05*. In addition, SN2 has a negative contribution because its value was ( $\beta = -.173, p = .063$ ) indicating a negative and insignificant influence on TMS adoption because p values were greater than 0.05. Also, SN3 had values of ( $\beta = .633, p = .000$ ) which shows a positive and significant relationship with TMS adoption, meanwhile SN4 has a positive but insignificant contribution ( $\beta = .111, p = .123$ ) to TMS adoption. Additionally, SN5 was found having positive and significant contribution on TMS adoption with (.159,  $p = .050$ ) this is because p value was less than 0.05. But the contribution of SN5 was found minimum since the positivity level and significant level was low. After determining the impact of each subjective norm attribute on TMS adoption, data show a positive association between SN and TMS adoption (.679,  $p = .000$ ). This suggests that subjective norms have a considerable and favorable impact on TMS uptake as detailed in table 4.3. Because SN2 and SN4 have no bearing on TMS adoption, they should be disregarded during TMS adoption.

**Table 4.3: The Influence of Subjective Norms on Traffic Management System Adoption**

Variable	Standardized coefficient	Sig
(Constant)	11.525	.000
Coworkers' influence (SN1)	.679	.000
Top management support (SN2)	-.173	.063
Client acceptance (SN3)	.633	.000
Stakeholders influence (SN4)	.111	.123
Superior influence (SN5)	.159	.050
<b>Subjective Norms (SN)</b>	<b>.679</b>	<b>.000</b>

*Dependent Variable: TMSA*

Source: Researcher, (2021)

#### 4.3.3 Influence of Perceived Behavior Control on Traffic Management System Adoption

The study postulated that perceived behavior control has a favorable and significant influence on traffic management system adoption. Multiple regression analysis was used to examine the above-mentioned hypothesis. The findings show that perceptions of behavior control have a significant impact on traffic management system acceptance. The results reveal that three aspects of perceived behavior control namely; PBC2, PBC3 and PBC5 have a considerable impact on TMS adoption unlike PBC4 and PBC1 which has an insignificant relationship. Findings show that PBC2 influence TMS adoption as evidenced by its value of ( $\beta = .474, p = .000$ ) which shows a positive and significant influence on TMS adoption since  $p$  value was less than 0.05. Also, PBC5 had a value of ( $\beta = .449, p = .000$ ) which illustrates a positive and significant relationship with TMS adoption. These variables should be encouraged in efforts to adopt TMS. Controversially, however, PBC1 had a negative and insignificant contribution with a value of ( $\beta = -.158, p = .061$ ) and PBC4 ( $\beta = -.080, p = .530$ ) also has a negative and insignificant contribution, this is because  $p$  value was above 0.05. Generally, PBC has positive and significant contribution with TMS adoption with ( $\beta = .435, p = .000$ ). This means that perceived behavior control has a significant and positive influence on TMS adoption as portrayed in Table 4.4. Additionally, PBC1 and PBC4 should be dropped since they have negligible influence on TMS adoption.

**Table 4.4: Influence of Perceived Behavior Control on Traffic Management System Adoption**

Variable	Standardized coefficient	Sig
(Constant)	16.775	.000
Availability of network (PBC1)	-.158	.061
POS machines (PBC2)	.474	.000
Availability of IT policy (PBC3)	.235	.008
Availability of expertise (PBC4)	-.080	.530
Availability of IT knowledge (PBC5)	.449	.000
<b>Perceived Behavior Control (PBC)</b>	<b>.435</b>	<b>.000</b>

**Dependent variable TMSA**

Source: Researcher, (2021)

#### 4.3.4 Model Specification

Regression analysis was found to be appropriate for both dependent and independent variables that were measured using 5-point Likert scales. Multiple linear models were built in this investigation, which was a good fit as detailed below:

$$TMSA = \beta_0 + \beta_1EA_i + \beta_2SN_i + \beta_3PBC_i + E_i$$

Where;

TMSA	=	Traffic management System adoption
EA	=	Employees attitudes
SN	=	Subjective norms
PBC	=	Perceived behaviour control
E	=	Error term
i	=	Respondents
$\beta$	=	Parameter to be estimated

Finally, as shown in Tables 4.10- 4.12, one independent variable, namely employee attitudes, subjective norms, and perceived behavior control, has a positive link with TMS adoption.

### 4.3 Discussion of Findings

#### 4.4.1 Influence of Employees Attitudes on Traffic Management System Adoption

The study analyzed the influence of employee attitudes on TMS adoption among police personnel. Table 4.10 shows that there is indeed a positive and significant link between employee attitudes and TMS adoption among police officers, as evidenced by the p-values which were discovered to be less than 0.05. The data findings suggest that employee attitudes have an impact on TMS adoption among police officers. This is because employee attitudes were discovered with (.658,  $p = .000$ ), and P-values less than 0.05. The findings of this study show that employees' attitudes have a positive and significant influence on the adoption of traffic management systems in the Iringa Municipality; thus, the hypothesis was accepted.

These findings suggest that staff attitudes play a role in TMS adoption by police forces. This is owed to the fact that employee attitudes in terms of accessibility, simplicity, perceived usefulness, trust, and confidence have positive and significant effects on traffic management system adoption for staff at the Iringa Municipal Police Force. Competence and security, however have minimal impact on TMS adoption. Employees can make effective and efficient use of the traffic management system by adjusting these variables. As a result, the ease with which personnel may access and understand traffic management systems (TMS) encourages adoption. Furthermore, adopting a traffic management system strengthens the trust of clients who require police services. These procedures including the use of an electronic management

system boost traffic confidence and competence by eliminating the possibility of customer corruption. Furthermore, accessibility of electronic machines its simplicity on using traffic management's system adoption increases fine collection and thus government revenue.

Sang et al., (2009) investigated the relationship between electronic governance and online engagement through citizen interaction with government through web portals. He came to the conclusion that attitudes are a key tool in the adoption of electronic government as a result of his research. Furthermore, the findings are consistent with those of Enrique et al., (2017), who conducted a study in Indonesia to examine the association between technological acceptance characteristics and the intention to adopt e-government transformation. This was a quantitative study with a survey questionnaire used to collect data. During data analysis, structural equation modeling was used, and the findings suggested that employee attitude was a key factor in e-government transformation and adoption in Indonesia.

In a similar vein, the findings of this study are linked to the decomposed behavior theory. For example, Sang et al., (2009) found that an individual's behavioral beliefs have a direct influence on their attitude for adopting something new or behavior, in reference to the theory of decomposed behavior in relation to employee's attitude. That is to say, if employees have a positive attitude toward their conduct or adopting new things, it is predicted that they will have a positive attitude toward their behavior or adopting new things, resulting in a desirable outcome. As a result, employee attitudes play a prime role in the implementation of an electronic management system in the police force. This finding supports the notion that good employee attitudes toward the usage of electronic tools are essential for the improvement of traffic management system adoption and use in order to maximize their efficacy.

#### **4.4.2 Influence of Subjective Norms on Traffic Management System Adoption**

The primary goal of this research was to analyze the impact of subjective standards on the adoption of a traffic management system. Subjective norms have a positive and considerable influence on traffic management system acceptance, according to the findings of a multiple regression analysis. This is because its (.679,  $p = .000$ ) P - values were less than 0.05, as shown in Table 4.11. Coworkers' influence, customer acceptance, and superior influence all have a considerable impact on TMS adoption, however top management's support and stakeholders' influence have a negligible impact.

These data suggest that subjective norms have an impact on TMS uptake. This means that traffic police coworkers assist one another in using the traffic management system. Furthermore, clients/customers, such as drivers, are adaptable to the traffic management system. Road safety stakeholders such as the safety committee/LATRA and the TRA, on the other hand, have an impact on the adoption of traffic management systems. All of these factors contribute to the police force's use of traffic management systems.

This study supports prior research, such as Shareef et al., (2011), who found that subjective norms have an impact on e-government adoption. According to their findings, subjective

norms aid in the adoption of electronic government and should be fostered at work. That indicates that subjective norms must be applied in order to implement electronic government systems such as traffic management systems. This finding is also linked to the deconstructed theory of planned behavior, which claims that subjective norms are necessary for the acceptance of e-government system services (Rana et al., 2015). The decomposition theory of planned behavior is an efficient tool for electronic system adoption.

Similarly, the current study coincides with Yu et al. (2010), who argue that subjective norms are an important instrument for the adoption of electronic government systems. As a result of the findings, the traffic management team should enforce the application of subjective norms in order to improve TMS adoption and efficacy in the Police Force.

#### **4.4.3 Influence of Perceived Behavior Control on Traffic Management System Adoption.**

The impact of perceived behavior control on Traffic Management System adoption was studied in this research. Multiple regression analysis was used to investigate the link, and the results demonstrate a negative and negligible relationship, as shown in Table 4.16. This is because the results of regression analysis show (.435,  $p = .000$ ), indicating that the  $p$  values observed are less than 0.05, which is above the threshold level for a meaningful association. This suggests that the regulation of perceived behaviors has an impact on the adoption of traffic management systems. The POS machine, the availability of IT policy, and the availability of IT knowledge are all variables that have a significant impact on TMS adoption. Availability of network however has a negligible link with the availability of knowledge.

Furthermore, in the Police Force, perceived behavior management should be viewed as a critical necessity that must be encouraged in order to ensure employee commitment to the electronic government system. This is due to a lack of focus on achieving better results in the adoption of traffic management systems. However, all attributes of perceived behavior control, such as the availability of network facilitating the adoption and use of the traffic management system, the availability of digital resources (POS machines) enhancing the use of traffic management system, the availability of IT government policy and regulation influence, and the presence of a specific person (expertise) and required knowledge for using this traffic management system, had minimal effects on TMA adoption. According to descriptive analysis, only the availability of IT knowledge and the availability of IT policy scored 4.0183 and 3.7798 mean values, respectively, among the five indicators of perceived behavior control. Other variables with low mean values included the presence of a POS machine (2.9450), the presence of a network (2.3670), and the presence of competence (2.6239). This finding suggests that these dimensions had no effect on TMS adoption in the police force.

Furthermore, it appears that, in addition to these dimensions not being well practiced, there may be other dimensions not examined in this study that are essential in the adoption of traffic management systems in police forces. These factors may have a greater impact on the link between perceived behavior control and TMS uptake. Future studies should analyze other factors that affect the influence of perceived behavior control on TMS adoption in the police

force that were not included in this study in order to expound the understanding of the construct of perceived perceived behavior control on TMS adoption. However, IT knowledge, IT policy, POS machine, network, and competence by themselves are unable to explain the predictive potential of perceived behavior control on TMA adoption in police forces.

The current study's findings contradict those of Ranaet al., (2015), who investigated citizen adoption of the electronic government system and found that perceived behavior control facilitates the adoption and use of the technology. Furthermore, the research findings contradict claims given by Budjianto and Hangjung (2009) that facilitating conditions such as perceived behavior control increase the use of electronic government systems.

The key insight from the current study's findings and discussion is that perceived behavior control has a positive and significant impact on TMS adoption. As a result, when other factors are taken into account and merged with IT knowledge, the study finds that IT policy, POS machine, network, and expertise may adequately explain the considerable impact of perceived behavior control on TMS adoption.

## **5 Implications of the Findings**

### **5.1.1 Theoretical Findings**

Following the analysis and validation of the major construct and indicator variable on measuring the decomposed theory of planned behavior, the findings of this study aid in altering the theory in the context of electronic government system adoption in Tanzania in the perspective of the police force. This means that employee attitudes, subjective norms, and Perceived Behavior Control should all play a significant role in encouraging TMS adoption.

**5.1.2 Managerial Implication:** This study will aid the Ministry of Home Affairs, which is in command of the police force, leaders, and personnel, in understanding the relationship between the study's major premise and the deployment of an electronic government system. Knowing these circumstances can help develop strategies for effective and efficient electronic government system adoption, such as increasing network availability and expertise, as well as training employees on the benefits of the Traffic Management System, which will ultimately improve police force performance. The applicability of these constructs will improve service delivery to consumers.

**5.1.3 Policy Maker:** The findings of this study contribute to a greater comprehension of the factors that influence the adoption of electronic government systems in Tanzania. Findings on each component of employee behavior intention, such as employee attitude, subjective norms, and perceived behavior control, are critical for the law enforcement policy and its review.

## 6. Recommendations

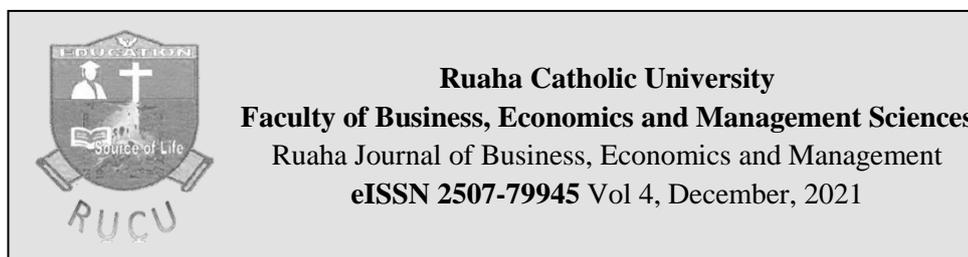
This research focused on the role of employee behavior in the adoption of electronic government systems in Tanzania, specifically in the police force. All aspects of Employee Behavior Intention had a substantial impact on TMS adoption in the Tanzania Police Force, according to the findings. As a result, these characteristics should be enforced to significantly improve performance. Contrary to popular belief, a few items related to employee attitudes, subjective norms, and perceived behavior control that were determined to have negligible impact on TMS adoption should be eliminated.

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**Effects of Human Resources Practices on Employees Performance in Tanzania. A case of Iringa Urban Water Supply and Sanitation Authority (IRUWASA)**

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### **Abstract**

*Although the influence of management practices on employee and organizational performance is well documented, there is however limited empirical evidence of the effects of employee engagement, motivation, and job satisfaction. The current Human Resources study, which was conducted at IRUWASA in Iringa Municipality therefore analyzed the impact of human resources practices on employee performance, and parameters examined include; employee engagement, motivation, and job satisfaction on employee performance. The study used a mixed research approach, with quantitative research taking precedence and qualitative research complementing the quantitative design. Since the population was 130, the study used a cross-sectional research approach using data from 97 respondents. Both descriptive (mean, frequencies, and percentages) and inferential statistics were used to analyze the data (correlation analysis). Employee engagement, motivation, and job satisfaction all have a substantial impact on employee performance, according to the findings. According to the survey, HR practices should be improved because providing employees with skills and information enables them to be committed and have high morale, resulting in improved performance. According to the findings, all three variables, namely employee engagement, motivation, and work satisfaction, have a considerable impact on employee performance. IRUWASA is encouraged to keep assimilating these three variables in their employee performance strategies.*

**Keywords:** Human Resource Practices, engagement, employee motivation and job satisfaction

### **1. Introduction**

Human resource management is a corporate function in which duties and activities connected to personnel are derived and combined. Human resource management, according to Paposa and Kumar (2019), is the "process of attracting, developing, and sustaining a competent and dynamic workforce to meet organizational mission, objectives, and strategies." Human resource management (HRM) is defined as the strategic integration of human resource practices into employee management and development. Human resource management, as a novel concept, encompasses the policies, procedures, and systems that influence employees' behavior, attitudes, and performance, according to this definition (Siddiqui and Sahar, 2019).

Human resource planning, employee recruitment and selection, training and development, performance management, employee engagement/involvement, motivation, satisfaction, and

compensation management, according to these authors, are some of the most important HRM practices that support the organization's business strategy. This enhances the function of personnel management to include remuneration, appraisal, recruiting, firing, and reward systems, among other facets of the employment relationship. This recognizes HR practices as critical to the firm's performance. Although many firms (large and small) do not fully integrate these HR activities into a strategic HR strategy, big enterprises tend to have more of the individual practices that make up an HRM system.

The history of human resource management and its methods can be traced back to societal views and attitudes towards employees, as well as organizations' responses to public policy and trade union growth (Kumari, Joshi and Pandey, 2014). The extreme disciplinary measures and fines imposed by factory owners in the early stages of the Industrial Revolution in Britain were, in part, a response to the serious problem of imposing standards of discipline and regularity on an unskilled workforce (Mathias, 1999). In the 1840s, common humanity and political pressure combined with enlightened self-interest among a fraction of the larger employers to raise awareness of alternatives to coercion, punishment, and monetary reward for managing their employees. Human resource management practices are thought to have evolved in the 1920 when the first formal HRM function and department was initiated in America and Europe (Okpara, 2014).

The human resource management functions, once responsible for record keeping and maintenance, has evolved into a strategic partner in organizations (Ferris, Hochwarter, Buckley, Harrell-Cook and Frink, 2019). People who worked during the 1600s to 1700s were guided by a craft system. Under this system, the production of goods and services was generated by small groups of workers in relatively small workplaces, usually in a home. In the early 1900s, many changes occurred in the work place. After industrial revolution, machines and factory methods that increased production were introduced. However, several problems occurred with this increased production. Since the machines required several people to operate them, the number of workers increased dramatically. This forced managers to develop rules, regulations, and procedures to control the workers. Some of the regulations required an increase in job specialization, which led to boring, monotonous jobs (Anthony, Perrrewe and Kacmar, 2016). At that time, with the effect of scientific management, workers were seen as a part of a machine without considering that they were social human beings.

## **2.1 Theoretical Literature Review**

### **2.1.1 The AMO Theory (Ability, Motivation, and Opportunity to Participate)**

According to the AMO theory, the components of Ability, Motivation, and Opportunity are the three independent work system elements that form employee characteristics and eventually lead to improved performance of an individual and organization in general. Through these components' organization interests are best served due to the fact that AMO theory paves the way for the line managers to use effective approaches that will improve performance, these approaches include employees' engagement, involvement and job satisfaction enhancement.

Ability refers to those practices and policies that HR practices to ensure employees possess or gain the required skills, knowledge, and ability to perform their tasks within minimum supervision, for example, employees' engagement in various organization matters like involvement in decision making or formulation of various organization policies. Secondly, motivation refers to the ways in which the employees are motivated to put more effort into performing certain tasks mainly by rewarding them for the efforts they have already put into their jobs. Lastly is opportunity enhancing HRM practices which aim at engaging employees' involvement through providing opportunities. Opportunities refer to practices that delegate decision-making authority, responsibility from top management to lower cadre staff through information sharing. All these three practices strengthen employees' trust and faster performance.

### **3.0 Methodology**

In this study, the mixed research method was used since both qualitative and quantitative approaches were used consecutively, with a stronger emphasis on the quantitative method because it used a statistical model to assess data and provide thorough proof that answered the study's research questions. The study used two rounds of data collecting: the first phase focused on quantitative data collection and analysis, while the second phase focused on qualitative data follow-up to explain and supplement the quantitative findings. The quantitative method was used when surveying IRUWASA personnel, while the qualitative method was used when interviewing the managers of the units in which these employees are working. The study employed a descriptive cross-sectional research design to examine the impact of human resource practices on employee performance. It's cross-sectional since the data collection, analysis, and interpretation were all completed at the same time. The target population for this study was all 130 workers of the Iringa Urban Water Supply and Sewerage Authority (IRUWASA) in Iringa Municipality, with a sample size of 97 respondents determined by Krecjie and Morgan (1970). Quantitative and qualitative data were acquired using a questionnaire and an interview guide, respectively. Descriptive and inferential statistics were used in the analysis.

### **4.0 Results**

#### **4.1.1 Respondents' Gender**

According to Table 4.1, the study had a total of 97 (100%) respondents who completed the questionnaires. There were 56 males (57.7%) and 42 females (42.3%) among the total responders. According to the findings, male employees at IRUWASA outnumber female employees by a significant margin. Men are more aggressive and more likely to have ambition towards success, according to Robbins and Judge (2008), hence men do better than women. Most stereotypical disparities that are typically used to describe men and women in organizations are invalid, according to Ivancevich, Konopaske, and Matteson (2011). Several studies corroborate this idea, finding no variations in work performance between men and women.

#### 4.1.2 Respondents' Age

According to the statistics, 53 (54.7 %) respondents were between the ages of 20 and 34. 33 (34.1%) of those who responded were between the ages of 35 and 44. 38 (35.1%), while 11 (11.3%) were above the age of 50. The figures show that all age groups were taken into account when the data was gathered. On other hand youth aged between 20-34 years constituted 54.7% of the sample size. A person's age is the number of years he or she has lived since birth. Older people will not work as efficiently as their younger counterparts , especially in the execution of certain duties (Gelderblom, 2006). In carrying out specific responsibilities assigned by the organization, a young individual's body is unquestionably stronger than that of an older person. Parents, on the other hand, can perform better than younger in certain jobs. This is due to variables such as experience, which allows older people to provide greater counsel than youngsters. Workplace changes are dependent on the employee's age. If the job needs a lot of physical labor or a quick reaction, age can be a disadvantage, but expertise or age experience can help improve performance in relation to the tasks at hand (Warr, 1994).

#### 4.1.3 Respondents' Marital Status

Table 1 shows that 17 of the total respondents (or 17.5 %) were single. There were 58 married respondents (59.8%), 10 divorced respondents (10.3%), and 12 separated respondents (12.4%). According to the findings, IRUWASA had a higher percentage of married employees than single employees. Married folks have more responsibilities to their families and require greater employment stability and security. As a result, they are expected to devote more time and effort to their current employer than their single colleagues. Marriage, according to Becker (2018), is economically beneficial since it allows for higher specialization. He suggests that married workers are able to specialize in labor market activities while their spouses specialize in household production. According to Crawly (2005), married employees have higher intention to perform due to family commitment than unmarried employees.

**Table 1: Respondents' Profile**

<b>Gender of respondents</b>	<b>Frequency</b>	<b>Percent</b>
Male	56	57.7
Female	41	42.3
<b>Total</b>	<b>97</b>	<b>100.0</b>
Age of respondents	Frequency	Percent
20-34	53	54.7
35-44	33	34.1
50+	11	11.3
<b>Total</b>	<b>97</b>	<b>100.0</b>
Marital Status	Frequency	Percent
Single	17	17.5
Married	58	59.8
Divorce	10	10.3

Separated	12	12.4
<b>Total</b>	<b>97</b>	<b>100.0</b>
Education levels	Frequency	Percent
Not attended	7	7.2
Primary education	12	12.4
Secondary education	39	40.2
Technical education	13	13.4
University education	26	26.8
<b>Total</b>	<b>97</b>	<b>100.0</b>
Work experience	Frequency	Percent
0-5 year	11	11.3
6-10 years	22	22.7
11-15 years	33	34.0
Above 15 years	31	32.0
<b>Total</b>	<b>97</b>	<b>100.0</b>

**Source: Field data (2021)**

#### **4.1.4 Respondents' Education**

Results in Table 1 show that 7(7.2%) had never attended schools, 12(12.4%) lacked basic primary education, 39 (40.2%) of respondents had attained secondary level of education, 13(13.2%) hold technical education certificates from Vocational Training Institutes like VETA and the remaining 26(26.8%) had university degrees. According to Easterlin (2007) the skills gained through education are a mark of performance level that an employee can exhibit. However, different fields of specialization are needed in order to meet the labor needs within Universities. Cushway (2003) observes that in modern times, individuals may be used productively in a flexible manner disregarding their original qualifications when they were being employed. This may not be reflected in job descriptions. In line with this is the fact that organizations are majorly interested in talents, or what can be positively established as possible contributions to organizations if hired, more than the academic qualifications that the workforce has.

#### **4.1.5 Respondents' Work Experience**

Regarding employees work experience results in Table 1 shows that 11(11.3%) had 5 years of work experience, 22(22.7%) had 6-10 years, 33(34.0%) had 11-15 years, and the remaining 31(32.0%) exceeded 15 years of work experience. Dickson and Lorenz (2009) posit that an increase in work experience also increases competence. Substantial work experience also implies adequate expertise. In psychological terms, skilled employees who have above-average abilities with adequate education or knowledge can easily achieve the expected outcomes. Marisa and Sonia (2005) define the working experience as a period of

time in which a person is actively involved in a company and reflects the loyalty of the workforce in an institution where he works. A longer working period will make a person perform better and be more reliable.

#### 4.2 Influence of Employees Engagement on Performance

Regarding the influence of employee engagement on employees' performance, the results in Table 2 reveal that employee engagement enhances internal communication which in turn facilitates performance. This is evidenced by the mean of 4.56 and a standard deviation of 1.164 implying that the majority of respondents believe that employee engagement enhances internal communication. Also, the study reveals that employee engagement or involvement enriches employees' decision-making skills since the aggregate score shows a mean of 3.81 and a standard deviation of 1.286. Employee engagement was also found to have a relationship with performance as it was revealed that it increases employees' commitment and participation in various issues as aggregate score shows mean of 3.70 and standard deviation of 1.243 and 3.74 and standard deviation of 1.354 respectively. The study reveals that by engaging employees in various organizational issues, their capacity to meet deadlines also increases, as evidenced by a mean score of 3.45 and a standard deviation of 1.444. Lastly, the study found that employee engagement increases the feeling of ownership as evidenced by a mean score and standard deviation of 3.99 and 1.477 for ownership and 3.33 mean and standard deviation of 1.491 for handling customers with great care.

**Table 2: Employee engagement**

Employees engagement	Mean	Std. Deviation
Employee engagement enhances internal communication.	4.65	1.164
Employee engagement enriches employees with decision-making skills.	3.81	1.286
Employee engagement employee's commitment in the organization.	3.70	1.243
Employee engagement enhances employee participation/involvement.	3.74	1.354
Employee engagement increase employees' capacity in meeting deadlines.	3.45	1.444

Employee engagement makes employees feel he or she is part of the organization.	3.99	1.477
Employee engagement practices enable employees to handle customers with care.	3.33	1.491

**Source:** Field data (2021)

Furthermore, when asked which benefits employees and the organization receive from employee participation in resolving various organizational challenges, the above findings were consistent with qualitative findings quoted below, as one interviewee noted.

*"At IRUWASA, we have a variety of human resource practices, such as human resource planning and employee engagement/ involvement, for a variety of reasons, including educating new employees with practical knowledge, training them to cope with new technology or system changes, and so on. All of these practices have been useful since employees now have the information and skills they need to complete their responsibilities, as well as the ability to follow regulations, policies, and government instructions. Employees will feel valued and appreciated if they are kept informed about what is going on in the organization."*

### 4.3 Influence of Employee Motivation on Organizational Performance

On the influence of employee motivation practices on employees’ performance, Results in table 3 reveal that employees’ motivation practices boost their work morale owing to a mean score of 3.49 and a standard deviation of 1.459. Enhances employees’ overall personality had a mean score of 3.45 and a standard deviation of 1.258, reduction of supervision level scored a mean of 3.34 and standard deviation of 1.180, enhancement of pro-activeness with a mean score of 3.31 and standard deviation of 1.202, absenteeism reduction with a mean score of 3.19 and standard deviation 1.286, ability to defend the employer with a mean score of 3.38 and standard deviation of 1.185 and lastly enhanced organizational image with a mean score 3.45 and standard deviation of 1.250.

**Table 3: Motivational practices**

Motivation practices	Mean	Std. Deviation
Motivational practices boost employee morale.	3.49	1.459
Motivational practices enhance employees’ overall personality.	3.45	1.258
Motivational practices reduce the need for supervision in our organization.	3.34	1.180

Motivational practices enhance employees' proactivity.	3.31	1.202
Motivational practices reduce employee absenteeism.	3.19	1.286
Motivation practices make employees defend the current employer all the time.	3.38	1.185
Motivation practices help organization in improving their image	3.45	1.250

**Source: Field data (2021)**

Moreover, one interviewee stated that *“Motivation practices like training, coaching, and leading and equipping staff with knowledge and skills, are used to boost employee morale because they increase staff confidence and in turn reduce the need for constant supervision”*.

#### **4.4 The influence of Job Satisfaction on Employees Performance**

On the influence of job satisfaction on employee's performance, Results in table 4 reveal that job satisfaction enhance employee's commitment to their responsibilities as evidenced by a mean score of 3.07 and a standard deviation of 1.340, also job satisfaction enhances teamwork as per a mean score of 3.05 and standard deviation of 1.219. Flexibility had a mean score below the average mean of 3.0, thus despite the implementation of job satisfaction practices, employees of IRUWASA are not flexible. It was further revealed that job satisfaction increased the ability to cope with organizational changes as evidenced by a mean score of 3.49 and a standard deviation of 1.378. Further revelations were that the ability to meet standards was enhanced according to a mean score of 3.43 and a standard deviation of 1.274. lastly, the notion that job satisfaction decreased the need for constant supervision was supported as evidenced by a mean score of 3.10 and a standard deviation of 1.186. conclusively, therefore, job satisfaction improves employee performance.

**Table 4: Job satisfaction practices**

	Mean	Std. Deviation
Job satisfaction improves my commitment to the job.	3.07	1.340
Job satisfaction increases my teamwork spirit.	3.05	1.219
Job satisfaction increases my flexibility.	2.94	1.248
Job satisfaction increases my desire to keep working in this organization	3.41	1.188
Job satisfaction practices enhance my ability to cope with organizational change.	3.49	1.378

Job satisfaction enhances my ability to meet organizational deadlines	3.43	1.274
I require minimal supervision because am satisfied with my job	3.10	1.186

Source: Field data (2021)

In addition to the above findings, the correlation analysis was conducted to test the study's hypotheses and results in Table 5 below reveal that; Employee motivation, employee engagement, and employee job satisfaction had a considerable influence on employee performance.

**Table 5: Correlations Output**

		PERF	EME	MOTP	JOS
PERF	Correlation Coefficient	1.000			
	Sig. (2-tailed)	.			
	N	97			
EME	Correlation Coefficient	.087	1.000		
	Sig. (2-tailed)	.0396	.		
	N	97	97		
MOTP	Correlation Coefficient	.182	.151	1.000	
	Sig. (2-tailed)	.0275	.139		
	N	97	97	97	
JOS	Correlation Coefficient	.097	.029	.206*	1.000
	Sig. (2-tailed)	.0345	.777	.043	.
	N	97	97	97	97

\*. Correlation is significant at the 0.05 level (2-tailed).

## 5.0 Conclusion and Recommendations

According to the findings, HR policies improve internal communication, enhance employees' decision-making abilities, and promote employee organizational engagement. Increase employees' ability to meet deadlines, increase feelings of ownership, and treat employees with care. Additionally, motivation practices improve performance by boosting employees' morale, enhancing their personalities, reducing supervision costs, increasing employees' pro-activity, lowering absenteeism, and enhancing the organization's image. It is also conclusive that job satisfaction increases employee commitment, teamwork, ability to cope with organizational change, and the ability to meet work standards. Finally, because HR practices were proven to have an impact on employees' performance in various ways, the study advises

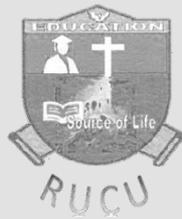
IRUWASA to continue delivering these HR practices, but to do so while adhering to all key training procedures.

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## **Determinants of Mobile Banking Usage in Tanzania: A Case of CRDB Bank Customers in Iringa Municipality**

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### **Abstract**

*Low-income earners now have better access to a broad range of services owing to the widespread use of mobile phones, and mobile banking is one of these services. In several countries across Sub-Saharan Africa, particularly Tanzania, mobile banking is now a crucial means of financial inclusion. The determinants of mobile service consumption in Tanzania were investigated in this study, which focused on CRDB Bank customers in the Iringa Municipality. In particular, demographic, motivational, and personal variables were investigated for their influence on mobile banking usage. The study used a mix of research methods, with the quantitative approach dominating and the qualitative data being used to augment the quantitative data. Because the data collection, analysis, and interpretation were all done at the same time, the study used cross-sectional research. A questionnaire was also used to collect data from 100 CRDB bank customers in the Iringa Municipality. The information from key informants was gathered using the interview guide. Both descriptive (percentage, frequency, and mean) and inferential statistics were used to analyze the data (Regression and Correlation analysis). The findings imply that motivating factors (reliability, security, speed, responsiveness, and ease of use) and personal attributes (desire, social influence, experience, personal ambition, trust, and attitude) had a positive significant influence on mobile banking usage, while demographic factors including; age, gender, education, and marital status had a weak relationship with mobile banking usage. It is therefore recommended as per the study findings that banks should make additional efforts to guarantee that dependability, simplicity of use, responsiveness, and speed are improved.*

**Keywords:** Mobile banking, Customer, Usage

### **1. Introduction**

The vast and quick development of information and communication systems has resulted in a more diverse and extended use of technological methods by both organizations and individuals, which is reflected in the increased use of the Internet as a prime communication means. Other forms of communication include mobile phones, often used in a variety of activities; including marketing, which includes a variety of strategies that have been adopted by various organizations to include; electronic, internet, mobile marketing, etc (2019, Mori).

Mobile banking is an innovative technology that has gained popularity in Africa and other parts of the world. Mobile banking services include; balance inquiry, fund transfer, and other services. The adoption of mobile banking has brought about changes in banking operations following the advancement of mobile communication techniques and collaboration with mobile service providers. As a result, mobile banking technology is a convenient financial transaction option for both individuals and the banking sector (Munisi, 2015).

Many countries were still in the trial-and-error phase of mobile banking technology implementation in the early 2000s. Mobile banking, like any other system, presented numerous obstacles to both customers and service providers. With the constant inventions of mobile phones, the services improved and got more effective while also becoming more user friendly with time. According to Makanyeza (2017), mobile banking services have successfully provided consumers with time, freedom, cost-saving, and market expansion opportunities. Mobile phone menus and other more recent applications can now connect bank systems to the phone network, resulting in more user-friendly interfaces. Consumers can now access financial services at their convenience (Cheah et al., 2011). In 2008, The Bank of America alone had more than 1.9 million clients who used mobile banking (Ajide, 2016).

In Tanzania, mobile banking is a type of mobile computing that allows users to bank from anywhere and at their own convenience by utilizing a mobile portable device and service such as SMS (SMS). Mobile banking eliminates the space and time constraints that come with banking activities like checking account balances or moving money from one account to another.

The recent introduction of the 4G wireless broadband service has significantly boosted internet use. Although indicators show that there is rapid growth in the Tanzanian ICT infrastructure, communication facilities are mainly available in the urban areas leaving the rural areas, where the majority of Tanzanians reside underserved (Mori, 2019 and Abidinor and Mbamba, 2017). Despite the rapid increase of wireless commercial services, the use of mobile banking services is still lower in Tanzania than was expected by the bank (Cruz et al., 2019) thus, the mobile banking market is still underutilized. That means the widespread adoption and broad use of cell phones do not rightly reflect the adoption and use of mobile banking, although mobile banking, perhaps, was the first commercial mobile service in Tanzania (Scornavacca and Hoehle, 2007). Hence the critical question to be answered is “*What determines the usage of mobile banking services in Tanzania?*” This study intended to answer the question by examining the determinants of mobile banking services in Iringa.

## **1.0 Theoretical Framework**

## **2.1 Technology Acceptance Model**

Innovation and adoption of new technology have attracted substantial attention across literature. This has resulted in a plethora of models and ideas that are thought to influence the acceptance of new technology. The Technology Adoption Model is a model that depicts the acceptance and adoption of new technology (TAM). Many studies in industrialized countries have utilized the model to investigate the factors that influence mobile banking adoption.

TAM was created by Davis (1989) to investigate how various individuals adopt technology. It takes into account both the perceived simplicity of use and the utility of technology. The use of mobile banking is determined by the perceived simplicity of implementation. Individuals' attitudes regarding adoption will influence their decision to adopt new technology in the future. When people come across new technology, they make decisions about how and when they will utilize it based on a variety of criteria. Age, gender, experience, and individual willingness to use are some of these determinants (Davis, 1989). The model aids in the prediction of the primary factors of customers' behavioral intentions toward new technology adoption. External variables might be included as determinants of mobile banking usage in the model.

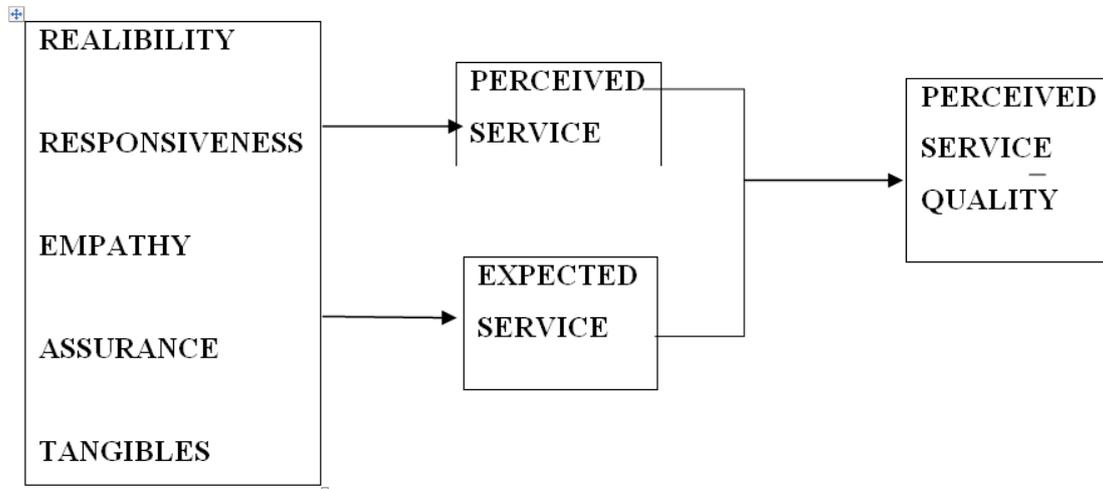
TAM was developed to demonstrate how external factors may influence individual decisions to employ new technology. The purpose of this study is to determine the factors that influence mobile banking users' utilization of mobile financial services. Mobile banking is a relatively new technology, particularly in the context of developing countries; TAM shows that users form opinions about the utility and ease of use of various technologies, which leads to real use of the technology. As a result, the model is beneficial in providing insight into new technology uptake.

TAM has been successfully applied to a wide range of technologies and users across cultural and economic settings in research studies, particularly those involving the acceptance and adoption of new technologies, regardless of whether participants reside in urban or rural areas. In his study on mobile banking in Iran, Mohammadi (2015) employed the model (TAM). Other researchers that employed the model include Wessels and Drennan (2010) from Australia, who used it to analyze consumer acceptance of mobile banking. Riquelme and Rios (2010) conducted a study in Kuwait and used the model (TAM) in the Moderating effect of gender in the adoption of mobile banking. Tobbin (2013) used the model to analyze mobile banking adoption among the unbanked in Ghana. TAM was upgraded to TAM2, and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, Morris, Davis, & Davis, 2003) was established as a unified theory of technology acceptance and use.

## **2.2 Service Quality Model**

The current study was also guided by the Service quality model which views service quality in light of the gap between the expected level of service and perceptions of customers regarding the service, The SERQUL/ ERVPERF MODEL is distinct from others because it determines more than one aspect of service encounters (Ravichandran *et al*, 2010). This view supports this study because the usage of mobile banking services is based on various dimensions (factors) of service encounters which influence customer usage of the services

such as, Reliability, Security Transaction cost, Speed, Responsiveness, Ease of use and this is what the current study seeks to establish.



**Figure 1: Model of Service Quality Perception**

**Source :**(Ravichandran *et al*, 2010) and Santos (2003)

## 2.0 Methodology

### 3.1 Research Approach

The research used a mixed methods approach, which included both quantitative and qualitative research methods. The fieldwork was divided into two phases: quantitative data collecting and qualitative data collection. The first phase began with the collecting of quantitative data and the examination of numerical data related to the study questions. Because the study's objective is to explain the causal relationship between demographic characteristics, personal factors, and motivating factors on mobile banking usage, the quantitative approach was more predominantly used. The second phase commenced with an in-depth interview conducted with Branch managers of the selected branches to obtain their opinions of efforts made by branches to enhance mobile banking use.

### 3.2 Research Design

The study adopted an explanatory cross-sectional sequential design of mixed methods. The study is explanatory because it closely examines the influence of demographic, personal, and motivating factors on mobile banking. The study further adopted a cross-sectional data collection method because data collection, analysis, and interpretation were conducted at the same time.

### 3.3 Population and Sampling

The population for this study is 22,572, according to data received from Iringa CRDB Branch Business Manager in May 2021, and the study's targeted populations are CRDB bank customers who use mobile banking services. In addition, four managers were interviewed in order to collect qualitative data. Both probability and non-probability sampling were used in this investigation. The area in which the investigation was conducted was chosen via non-probability sampling. This study area was chosen since it was the first in the Southern Highlands Zone to offer mobile banking services. Respondents who utilize mobile banking services were selected using probability sampling. In this study, all CRDB customers who utilize mobile banking services from the Iringa branch were sampled, with 22,572 customers serving as a representative sample of all CRDB customers.

The sample size was determined through a formula developed by Kothari (2004) as detailed below;

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

$$n = \frac{22,572}{1+22,572 \cdot (0.1)^2} = 99.75$$

$$n = 100$$

Where  $n$  = size of samples,  $N$  = total population=22,572;  $e$  = standard error of sampling (10%) is tolerated. Upon entering each value of the variable into the formula (1) above, a sample size of 100 respondents was obtained. Hair *et al* (2006) suggests that a research study designed to reveal factor structures should have more observations than variables, and that the minimum absolute sample size should be 50 observations. The systematic sampling method used to draw samples, where customers counted one to four and each fourth customer was interviewed until the sample of 100 customers was obtained. The systematic sampling procedure was employed to avoid bias.

### 3.4 Data Collection Methods

A well-structured questionnaire was prepared and tested before administration to respondents. The purpose of the administered questionnaire was to assist the researcher in clarifying the intended meaning of the questions, as one question could be understood differently by respondents. As a result, administering the questionnaire aids in clarifying the intended meaning of the questions to all respondents and ensuring that the language used is understandable to them.

Before being given to CRDB Bank in Iringa Municipality, a well-structured questionnaire was designed and tested. The purpose of the administered questionnaire was to assist the researcher in clarifying the intended meaning of the questions, as one question could be understood differently by respondents. As a result, administering the questionnaire aids in clarifying the intended meaning of the questions to all respondents and ensuring that the language used is understandable to them.

### 3.5 Data Analysis

For quantitative data, descriptive statistics are used in the sense that the researchers examined central tendency, measures of variance and used the weighted mean. The purpose of using a weighted mean is to obtain an accurate response and a clear picture of the responses to the questions given. Inferential statistics, on the other hand, were used to test theories and hypotheses produced during the study. Statistical Package for Social Science (SPSS) was used to analyze data collected in the field (SPSS). SPSS was used in this study because it is a computer software tool for statistical analyses, modifying data, and creating statistical proof. Thematic content analysis was used to analyze qualitative data.

### 3.0 Results

#### 4.1 Demographic Factors and its influence on Mobile Banking Usage

Age, education level, and experience have weighted means above the neutral point (3), while gender and married status have weighted means below the neutral point (3), as shown in Table 1. These data imply that user education, experience, and age have a positive relationship with mobile banking adoption, since educated users are more likely to learn new things and adopt mobile banking. Age was also found to have an impact on mobile banking usage, since younger generations have the advantage of growing up with technology, allowing them to use mobile banking because they use many online platforms in their daily lives. Not only that, but a person with prior technology experience can quickly adopt any new technology in a variety of settings, including the banking industry. Furthermore, the study found that users' marital status and respondents' gender have little bearing on mobile banking usage. The interview results from CRDB bank's Customer Service Manager confirmed these findings, he said.

"The number of people using mobile banking is growing every day, and we already have around 3600 people using this service." Some people are still hesitant to use mobile services because they are unfamiliar with how to use them or the benefits of doing so. Some people claim they can't use mobile banking since they don't have smartphones or computer tablets.

Another head of operations said that;

*"Most of younger people prefer mobile banking compared to older people, due to difference level of understanding on internet issues. Young people are quick learners compared to older who needs time to understand steps and functions of their mobile phones. So, I think education is quite vital for our customers' especially the older ones".*

**Table 1: Influence of demographic factors on mobile banking usage**

<b>One-Sample Test</b>						
Test Value = 0						
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Gender	28.864	99	.000	1.440	1.34	1.54
Age	24.094	99	.000	4.190	3.84	4.54
Marital Status	25.081	99	.000	2.150	1.98	2.32
Education level	26.237	99	.000	4.130	3.82	4.44
Experience in the bank	21.026	99	.000	3.970	1.78	2.16

**Source: Field data (2021)**

In addition, the researcher used spearman correlation to examine the aggregate impact of demographic characteristics on mobile banking usage, and the results in Table 2 revealed a weak positive link between demographic parameters and mobile banking usage.

**Table 2: Spearman correlation output on the influence of demographic factors on mobile banking usage**

<b>Correlations</b>				
			USG	DEF
Spearman's rho	USG	Correlation Coefficient	1.000	.010
		Sig. (2-tailed)		.923
		N	100	100
	DEF	Correlation Coefficient	.010	1.000
		Sig. (2-tailed)	.923	
		N	100	100

**Source: Field data (2021)**

The results of the spearman correlation were also confirmed by regression analysis, which revealed a moderate positive link between demographic components with a coefficient of 0.007 and a p-value of 0.939, which is greater than 0.05, as advised by Saunder et al., (2014). This conclusion contradicts Jordanian researchers Alafeef, Singh, and Ahmad (2011), Ethiopian researchers Teka and Sharma (2017), and Nigerian researchers Abayomi, Teye, Haq, and Mensah (2019).

**Table 3: Regression output**

<b>Coefficients<sup>a</sup></b>					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	10.857	1.278		.000
	Demographic Factors	.007	.090	.008	.939

a. Dependent Variable: Usage of Mobile banking

**4.2 Influence of Motivating Factors on Mobile Banking Usage**

Weighted mean was used in assessing factors may lead to mobile banking usage among CRDB customer In examining the parameters that may contribute to CRDB consumers in Iringa Municipality using mobile banking, a weighted mean was employed. Reliability, security, transaction cost, transaction speed, responsiveness, and ease of use were all identified as possible factors. The findings show that all motivating variables that scored above the neutral point influence mobile usage to a substantial extent. These findings are in line with those of Emmanuel (2018), who discovered that 68.2 % of all respondents believed that similar attributes examined in his study were linked to mobile banking usage.

**Table 4: Mean values of motivating factors**

<b>One-Sample Test</b>						
Test Value = 0						
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Reliability	28.270	99	.000	4.680	3.42	3.94
Security	28.901	99	.000	3.640	3.39	3.89
Transaction cost	30.727	99	.000	3.760	3.52	4.00
Transaction speed	30.259	99	.000	3.740	3.49	3.99
Responsiveness	30.937	99	.000	3.760	3.52	4.00
Ease of Use	29.453	99	.000	4.390	3.44	3.94

**Source: Field data (2021)**

Furthermore, the researcher used spearman correlation to examine the aggregate influence of motivating variables on mobile banking usage, and the results in Table 5 revealed a substantial association between motivating elements and mobile banking usage.

**Table 5: Spearman correlation output on motivating factors**

<b>Correlations</b>				
Spearman's rho	USG	Correlation Coefficient	USG	MOF
		Sig. (2-tailed)	1.000	.056
		N	100	100
	MOF	Correlation Coefficient	.056	1.000
		Sig. (2-tailed)	.028	
		N	100	100

**Source: Field data (2021)**

The correlation findings were also confirmed by regression analysis output in Table 6, which shows that there is a substantial positive link between motivating factors with a coefficient of 0.007 and a p value of 0.939, which is greater than 0.05, as recommended by Saunder et al (2014). These findings suggest that mobile banking usage is highly associated with reliability,

security, transaction speed, transaction costs, and ease of use among CRDB bank customers in Iringa Municipality. These findings are consistent with Yu's (2009) findings in New Zealand, who found that service quality dimensions influence mobile banking usage.

**Table 6: Regression output on Motivating Factors**

Model	Coefficients <sup>a</sup>				
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	12.132	1.907		6.361	.000
MOF	.062	.085	.073	.725	.010

a. Dependent Variable: USG

### 5.3 Personal Factors and their Influence on Mobile banking usage

Personal attributes that may lead to mobile banking usage among CRDB customers in Iringa Municipality were investigated using the weighted mean method. Desire, experience, personal ambition, trust, and attitude were all considered as personal variables. The findings show that all parameters that scored over the neutral point play a significant role in mobile banking usage. These findings suggested that personal desire, a positive attitude, trust, ambition, and social influence are all linked to mobile banking usage.

One respondent similarly said said " *I'm afraid of the overwhelming amount of information on some mobile banking interfaces, and some of them are confusing, so I prefer to queue since it's simple to receive advice from bank workers.*" *I also make mistakes owing to the smaller keyboard on smart phones, thus I don't use them for internet banking or online shopping. So I use my phone to make phone calls and listen to music.*"

**Table 7: Mean Values for Personal Factors**

	One-Sample Test					
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper	
Desire	29.619	99	.000	3.720	3.47	3.97
Social influence	23.689	99	.000	3.080	2.82	3.34
Experience	32.591	99	.067	3.340	3.61	4.07
Personal ambition	31.591	99	.000	3.820	3.58	4.06
Trust	31.967	99	.000	3.830	3.59	4.07
Attitude	32.742	99	.000	3.820	3.59	4.05

**Source: Field data (2021)**

The overall influence of personal attributes on mobile banking usage was tested using Spearman correlation, and the results in table 8 revealed a strong association between personal factors and mobile banking usage. These findings are consistent with the findings of

Raza and Rehman (2012), who discovered that a customer's inclination to use the same product or service again is influenced by their desire, habit, and social influence. The survey also reveals that knowledge, experience, and personal innovation all have an impact on e-banking adoption.

**Table 8: Spearman output on the influence of Personal Factors on Mobile Banking Usage**

		Correlations		
Spearman's rho	USG	Correlation Coefficient	1.000	.023
		Sig. (2-tailed)		.001
		N	100	100
	PEF	Correlation Coefficient	.023	1.000
		Sig. (2-tailed)	.001	
		N	100	100

**Source: Field data (2021)**

Additionally, the regression analysis output revealed similar results, with a coefficient of 0.11 and a p value of  $p=0.001$ , which is less than the cut-off point of 0.05, confirming the findings that personal attributes have a positive significant influence on mobile banking usage. The findings contrast those of Kahiga (2015), who found that there is no link between personal variables and mobile banking usage in Kenya.

**Table 9: Regression output on Personal Factors and Mobile Banking Usage**

Model	Coefficients <sup>a</sup>				
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	10.526	1.612		6.531	.000
PEF	.011	.072	.015	.147	.001

a. Dependent Variable: USG

**Source: Field data (2021)**

#### 4.0 Conclusion and Implications

The study shows that demographic characteristics have a weak relationship with mobile banking usage. The survey also found that several demographic parameters, such as education level, experience, and age of users, had a positive influence on mobile banking usage, whereas gender and marital status have no consequence. The study concludes that motivational factors have a positive significant impact on mobile banking usage. The study concludes that motivational factors have a positive significant influence on mobile banking usage. The intention to use mobile banking was found to be associated with reliability, security, transaction cost, transaction speed, responsiveness, and convenience of use. Finally,

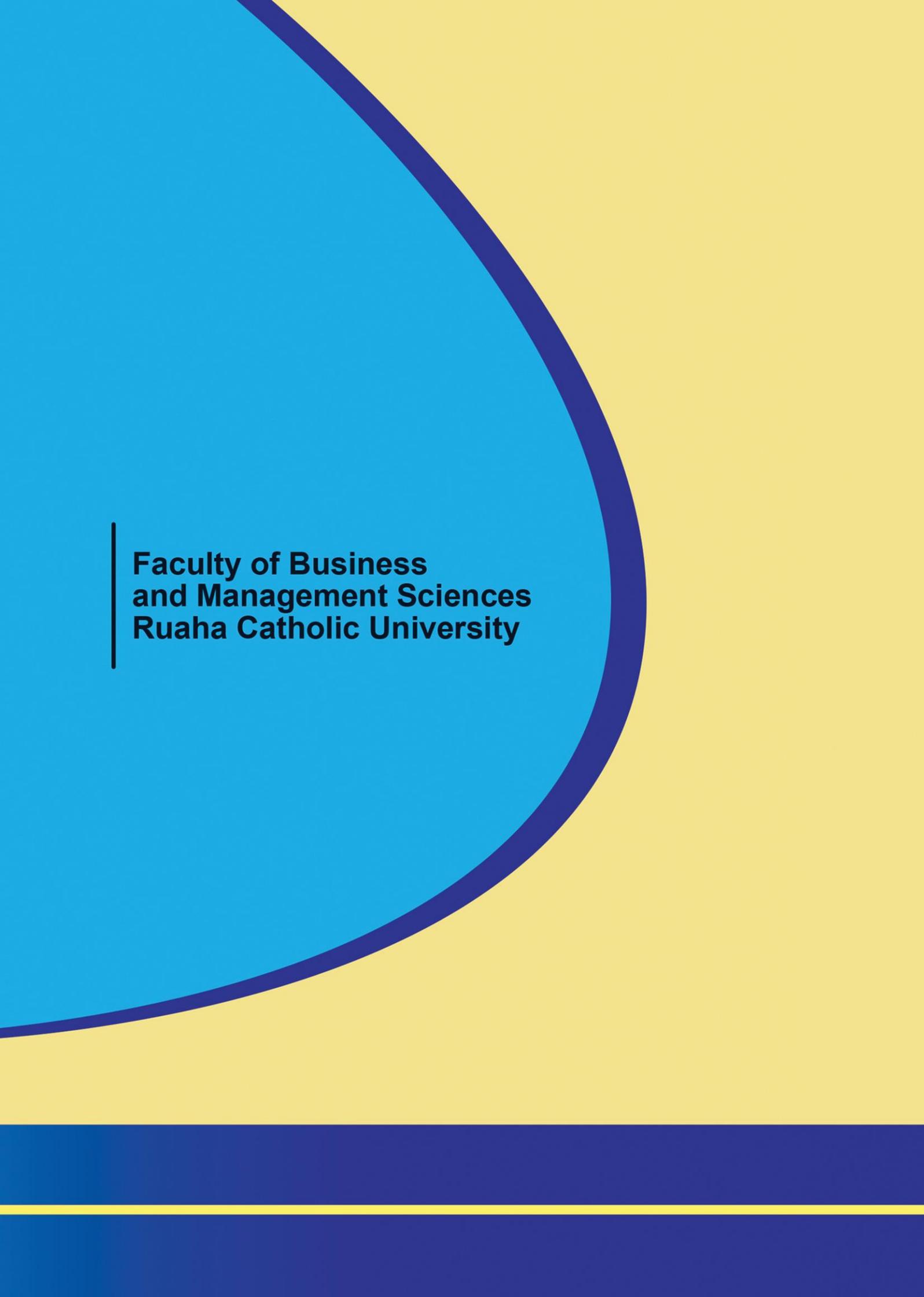
personal aspects are found to have a positive significant impact on mobile banking usage, according to the study. Desire, experience, personal ambition, trust, and attitude were all discussed as personal aspects. The findings show that mobile banking usage is influenced by a variety of factors. Because security has been found to have a substantial influence on mobile banking usage in Tanzania, the study suggests that service providers modify some existing policies on online services to ensure safety or security. In addition, CRDB Bank must guarantee that the quality of its mobile banking services is maintained, as these are the services that the majority of clients prefer.

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