Facilities management strategic roles and services quality performance in Nigeria's banking sector

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Abstract

Purpose - FM as a strategic management tool has been an attractive research topic among scholars and practitioners alike for decades. The primary purpose of this paper is threefold; to assess the extent of use of FM roles (strategic, tactical and operational); examine user satisfaction of service quality performance; and analyse the influence of FM roles on service quality performance using data from Nigeria's banking sector.

Design/methodology/approach – Relying on exploratory cross-sectional survey, 350 copies of a structured questionnaire were purposively distributed to senior management staff, bank staff, FM supervisors, and bank customers in Lagos, Nigeria. One hundred and forty (140) valid responses were returned to give a response rate of 40%. Data collected were analysed using descriptive, Spearman rank correlation and Kruskal Wallis tests.

Findings – It was discovered that strategic facilities planning, IT planning strategy, and real estate decisions are the most important FM roles at the strategic level; resource management, data control, and planning change at the tactical level; and implementations, building operations and emergencies at the operation level. Findings equally revealed that visual appealing of materials associated with services (Tangibles), insisting on error-free records (Reliability), willing to help (Responsiveness), having the knowledge to answer questions (Assurance), and giving individualised attention (Empathy) were the most important service quality performance indicators. Furthermore, the study revealed that strategic FM roles significantly influenced Tangibles, Reliability, and Responsiveness of staff and the services. Besides, Tactical FM roles significantly influenced all service quality indicators except Assurance; while operational FM roles had significant influence on Tangibles, Responsiveness and Empathy.

Originality/value – The study has provided first ever insight into the extent of FM strategic roles in the banking sector and influence of FM roles on service quality performance.

Key words: facilities management, service quality, user satisfaction, correlation analysis, banking sector, Nigeria.

Paper type Research paper

1. INTRODUCTION

Facilities management (FM) is a concept involving unified management of a company's built assets to ensure optimal service delivery of non-core functions with a view towards complementing the meeting of its strategic goals and objectives. It is a multidisciplinary occupation that ensures a functional workplace integrating "personnel space, procedure and knowhow (Arayici et al. 2012). In other words, it is a profession that cuts across many disciplines such as surveying, architecture, project management and building engineering. Its functional areas include "emergencies preparedness, communication, business continuity, human factors, leadership environmental stewardship and sustainability, finance and business, strategy, project management, quality, real estate and property management and technology" (IFMA, 2016). The growing popularity of FM is corroborated by a recent survey credited to ResearchAndMarkets.com by Businesswire (2021) which shows that the FM market across the globe, amid the COVID-19 crisis is expected to grow from US\$1.4 trillion in 2020 to US\$3 trillion in 2027. It is a generally accepted view that the emerging popularity of FM has led to its incorporation into the boardroom management of organisations resulting in what Barrett (2000) described as concepts of strategic FM and operational FM. According to Chotipanich and Lertarivanum (2011), strategic FM involves provision of long-term sustainability to business organisations, asserting that, to achieve strategic FM goals linked to overall strategic organisations, organisations must establish set of clear ideas prescribing methods and ways of implementations. In other words, facilities managers and FM directors develop strategic facilities plan that must align with organisation's strategic objectives. Operational FM, on the other hand involves the day-to-day routine administration of the non-core functions of an organisation to support long-term goals of the organisation. Such roles include such services as cleaning, security, catering and other janitorial services are carried out either by in-house team or outsourced to service providers. Tactical FM however serves as the link between Strategic FM and Operational FM and oversees the determination of the short-term tactical and operational strategies for implementation at the operational level while also determining punitive and reward system for performance.

The history of FM practice in Nigeria dates back to pre-independence era (before 1960 when Nigeria became an independent nation) when the Public Works Department (PWD) was responsible for management of public facilities. However, the discovery and exploration of oil during the 1970s led to increased revenue from oil. This created a good opportunity for massive infrastructure projects across the country by all levels of government (local, state and federal). According to Adewunmi (2012), the present-day practice of FM in Nigeria was spearheaded by two foremost oil giants Chevron and Mobil. Their entry into Nigeria was motivated by the oil boom. From the global perspective, FM has continue to be popular as companies become more aware of the industry's strategic benefits, particularly in terms of cost saving, efficiency, quality and sustainability, resulting in a varied and vastly competitive market place.

The post-independence era also saw governments becoming directly involved in advancing economic growth by nurturing private sector businesses and deliberately mobilising huge resources to encourage the investors. This evidently encouraged banks and other financial subsidiaries into the economic map of Nigeria. Nigerian banks have had to spend billions of dollars to put in proper place buildings and other infrastructure to enable them adjust to the astronomical growth and expansion that accompanied the industry in subsequent years to come. According to businessday.com, the Nigerian banking industry contributed over US\$405 billion to the country's GDP between 2017 and 2020, an indication of a formidable industry in the quest for the country's economic development. This has led to strengthening of the banks' facilities management sector to drive the non-core functions of the banks in supporting the core function of rendering financial services to the economy. Arguably, this is in realisation of the fact that effective management of the bank's built assets is a strategic key to having competitive advantage over its competitors. Evidently, this deliberate consideration is as a result of the important input properties add to eventual performance of a

business and acknowledgement of strategic position of property management to a company's economic status.

Research on FM and service quality performance have been well documented in the literature over the past decades; FM strategy (Barrett, 2000; Chotipanich and Lertariyanum, 2011; Ikediashi and Aigbavboa, 2018), FM service performance (Parasuraman et al., 1998; Futcher et al., 2004; Ikediashi and Mbamali, 2014a, Ikediashi et al. 2014b; Aluko et al., 2020a, Awuzie et al., 2021, Dasandara et al., 2022; Abdeen et al., 2022), FM customer satisfaction (Hui and Zheng, 2010, Ikediashi et al., 2015, Ikediashi et al., 2020, Tannor et al., 2022). While the inherent theoretical concepts on FM service performance and FM strategy have been widely covered in these studies, some gaps exist. First, a clear relationship between FM strategy (strategic, tactical and operational) and service delivery performance have not been investigated in the literature. Besides, most studies (Barrett, 2000; Chotipanich and Lertariyanum, 2011) mainly focused on strategic FM and operational FM ignoring tactical FM that serves as a link between strategic FM and operational FM. Moreover, although studies such as Chotipanich and Lertariyanum, 2011, Ikediashi et al. 2014b, and Perera et al. (2016) have published studies on FM strategy and service delivery in commercial properties such as banks, such researches have not provided a convincing argument about FM strategy and service delivery performance in the context of Nigeria's commercial properties such as banks. Additionally, although Perera et al. (2016) in exploring sourcing strategies for facilities management services, discovered that FM services aligned to strategic roles are more suitable for in-house sourcing while those aligned to tactical and operational roles are suitable for outsourcing, the study did not investigate influence of these roles on FM service quality performance. In a related study, Ikediashi et al. (2014b) utilised data involving 41 bank managers to assess factors of outsourcing decision for FM services in Nigeria's commercial banks. While the study clearly identified key outsourcing decision determinants from Nigerian banks' perspective, there was no deliberate assessment of FM functions at the three levels of strategic, tactical and operational functions and their link to stakeholders' satisfaction of FM services. With the rising popularity of FM especially at the strategic levels of management in organisations, quantification of the relationship between these FM roles and satisfaction of the services is worth investigating. Given the background above, the primary objectives are to:

- 1. use data from Nigeria's banking sector to assess the extent use of FM roles (strategic, tactical and operational);
- 2. examine user satisfaction of service quality performance; and
- 3. analyse the influence of FM roles on service quality performance.

This introduction is followed by a review of the relevant literature covering strategic management and service quality performance in section 2. This is subsequently followed by full details of the research methodology (section 3) while section 4 that follows details the results and discussion of research findings. Finally, conclusion, recommendations and implications of the study for theory and practice are presented in section 5.

2. LITERATURE REVIEW

2.1 The concept of FM strategy

Several definitions of FM have been developed by authors in the literature. In one of such, International Facilities Management Association (IFMA, 2012) defines FM as "the practice of coordinating the physical workplace with the people and work of an organisation and integrating the principles of business

administration, architecture, and the behavioural and engineering sciences". This conception considers FM as the process of using various aspects of management to oversee management of the workplace; a workplace being an enclosure where normal work activities of any nature are conducted; which could be an office, facility or business premises. In another perspective, FM is a combined model that aims to maintain, improve and adapt building and infrastructure of an entity to produce a setting that reliably underpins the principal purposes of that organisation (Barrett and Baldry, 2003).

FM as a strategic management tool has been an attractive research topic among scholars and practitioners alike for decades. This is largely expected as it involves all aspects of management of the physical place right from the initial concept of considering a new building/facility, getting it delivered, setting up services requirements, through to operating it throughout its life span (RICS, 2020). Expectedly, researchers (Kincaid, 1994; Chotipanich and Lertariyanum, 2011) and others have argued that integrating FM into the boardroom management of organisations enables FM units and departments develop their unique strategies that firmly align with the overall corporate strategy of an organisation. The resource based theory (RBT) provides a good basis for strategic FM. RBT is anchored on the premise that the fundamental drivers to an organisation's competitive advantage and outstanding performance lie in the attributes of its resources (Barney, 1986; Conner, 1991; Peteraf and Bergen, 2003). As such, FM strategy is necessary to enable FM properly deliver physical resources and support services to an organisation in such a way that it contributes to the organisation's competitive advantage.

In terms of FM strategy, Barrett and Owen (1992) categorised FM roles into operational and management functions. According to Patanapiradej (2012), the operational activities involve the day-to-day or routine functions tailored towards adding value to the physical, emotional and environmental resources of the user at the workplace. This undoubtedly supports the primary objectives of an organisation at the operational level which according to Nutt (2002) is the antidote for a successful FM practice. Plausibly, it is argued that without a good and functional operational FM, the perceived benefits of strategic FM will be hard to realise. Management function on the other hand, is categorised into tactical and strategic FM by Barrett and Owen (1992). Tactics are middle term action plans involving routine and specific managerial roles carried out in ways that support the core mandates of an organisation (Barrett and Owen, 1992; Patanapiradej, 2012; Perera et al., 2016). Meanwhile, Alexander (1996) perceives Strategic FM role as the one that formulates and communicates a facility policy. This include development of strategic facilities plan that identifies organisation's facilities business needs and how it can support and propel overall strategic business goals of the organisation. However, Johnson et al. (2008) is of the view that Strategic FM deals with complexities of long term goals that potentially shape the direction and future prospects of an organisation. To get a clear distinguishing features of the three levels, Jenson (2011) stated that Strategic FM deals with long term objectives, Tactical FM focuses on middle term goals while Operational FM creates a perfect environment for the use of the services on a day-to-day basis. A set of 15 factors that make up the three FM roles and their supporting references are presented in Table 1 to clearly demonstrate the distinction between strategic, tactical and operational FM.

Position of table 1

Essentially, the strategic FM goals are what constitute instructions to be passed down for implementation in the short term by managers at the tactical and operational levels. Therefore, all policy recommendations with regards to facilities management blueprints for an organisation are vigorously implemented at the two lower levels. Fundamentally, the tactical FM develops all disciplinary and recompense instruments including preparation of service level agreements for effective management of the FM plans, while the daily routine functional activities supervised by the line supervisors are within the operational FM (Ikediashi and Aigbavboa, 2018).

2.2 Measuring FM service quality performance

Service quality as performance measurement tool has become increasingly popular among public and private organisations including banks as they strive for excellence and business performance in order to survive. It has been described as a major determinant of business performance (Aluko et al., 2021a). Apparently, measuring performance enhances inherent and future facilities through the identification and evaluation of their performances. Therefore, it is an instrument employed by stakeholders in FM profession to close the gap between prospect of facilities users and standard of provided services (Ikediashi et al., 2020). FM performance measurement is practice of evaluating the level in which a procedure performs dedicated services compared with established benchmarks. FM service quality performance therefore is a group of measurable (objective and subjective) key performance indicators (KPIs) used by organisations such as banks to track performance. In a study on FM performance measurement, Yoon and Cha (2017) used survey approach to examine the critical success factors (CSFs) and key performance indicators (KPIs) for strategic FM performance of commercial office building in South Korea. Findings from the study reveal that reliability of service, timely responsiveness to emergency, tenant's safety, customer satisfaction and work execution control are the most critical factor successful FM performance evaluation. The study also discovered that training is essential to strengthen the monitoring; training for emergency situation, education and training for service mindset, regular meeting with tenants and safe inspection and patrol are the most important factors in enhancing the level of performance in the office building FM practice. Essentially, performance evaluation using KPIs are critical in sustaining the continued effectiveness and efficiency of FM practice in organisations.

Several of these indicators have been developed in the literature for measuring service delivery. These include the triple time, cost and quality performance indicators, balance scorecard model (Brackertz and Kenley, 2002) and SERVQUAL model (Parasuraman *et al.*, 1988). The SERVQUAL model employs five perspectives of "tangibility, reliability, responsiveness, assurance and empathy". Parasuraman *et al.* (1990) later outlined state of FM delivery, condensed to a five-dimensional index of tangibles, reliability, responsiveness, assurance, and empathy. Tangibles explains the look of the facility, tools, people, and information exchange materials. Reliability is the capability to achieve the expected service reliably and precisely. Responsiveness shows the readiness to assist users and the provision of prompt services. Assurance is the expertise and politeness of workforce and their capability to transmit trust and confidence. Empathy is the considerate, personal devotion provided by organisations to customers. Futcher *et al.* (2004) further asserted that facilities management is fundamentally a service industry in which people provide services to people.

SERVQUAL instrument has been used to measure service quality across several service industries such as hotels, banks, educational institutions, construction industry and operation, maintenance & repairs (Kettinger, 2009). For instance, Aga and Safakli (2007) used SERVQUAL instrument to examine the influence of service quality on clients' satisfaction in accounting firms, while Ismail *et al.* (2012) used the 5 dimensions of SERVQUAL to explore how contractors' quality performance affects clients' satisfaction in Malaysian higher institutions. Furthermore, Amankwah *et al.* (2022) used 18 clustered variables grouped into the 5 dimensions of SERVQUAL to model quality healthcare FM services in Ghana.

Although the effectiveness of SERQUAL model for measuring service quality and satisfaction which intentionally gave rise to SERVPERF model (Cronin and Taylor, 1994; Sureshchandar *et al.*, 2002), has been questioned in the past (Keuper, 2011), the universal parameters for assessing both models remain generic factors of tangibles, reliability, responsiveness, assurance and empathy. Accordingly, this study adopts 22 clustered statements grouped into 5 dimensions of service quality to assess service quality performance of FM service at the three levels of strategic, tactical and operation FM roles. The modified SERVQUAL dimensions are presented in Table 2. Moreover, this study adopted the SERVQUAL

framework to evaluate FM service quality performance in the banking sector because of its alignment to the cardinal mandates of banks which are service quality, responsiveness of staff to the delicate banking needs of the customers as well as customers' expectations.

Position of table 2

2.3 Past studies on FM roles and service quality performance

There is an apparent paucity of past studies on the influence of FM roles on service quality performance in commercial entities like banks. However, in a study on healthcare service delivery in Japan, Eleuch (2008) used a staggered methods trusted on scatter model to observe that patients in Japan perceived healthcare services using a direct compensatory process. In other words, loyalty satisfaction) is predicated on the technical features and patients' initial perception of staff and service organisation. In another study, May and Pinder (2014) examined the impact of support service management (SSM) on customer experience in NHS facilities in England and Wales and discovered that there is limited or dearth of empiricism from existing research to ascertain the role of SSM in healthcare's outcomes. Meanwhile, Ikediashi and Mbamali (2014b) investigated the underlying relationship between attributes of outsourcing decision made by managers of public hospitals on FM service performance. The research discovered among others, that quality concern remains a primary driver that influences the performance of FM services in health facilities. In yet another study, Aguome et al. (2020) investigated the consequence of FM on service performance of Nigerian ports. The authors established that space management positively influenced service quality, workplace programming and responsiveness. Based on this result, the consequence of FM on service performance of Nigerian ports was meaningfully positive. Before this, Waly and Helal (2010), in recognition of FM as a vital tool for continuous and sustainable improvements, examined the role and adequacy of FM the role and adequacy of FM for office buildings in Egypt using a questionnaire survey of 30 occupants in 8 office buildings in Cairo. The study discovered a direct link between application of FM practice and the function, technical, and behavioural aspects of the building. However, while the study was able to highlight the satisfaction level of the occupants for FM services predominantly found at the operational FM level, the current study examines the satisfaction level at the strategic and tactical FM levels and explore the relationship between the roles at these two levels and FM service quality performance.

Several studies have however used the SERVQUAL model to assess the influence of FM service quality on customer satisfaction. Aga and Safakli (2007) empirically assessed quality of customer services in professional accounting firms in North Cyprus and discovered that SERVQUAL instrument provided good measure of service quality in the firms as one (i.e., empathy) out of five dimensions of SERVQUAL was statistically significantly related to customer satisfaction. Additionally, Ismail *et al.* (2012) examined contractors' quality performance and explored the relationship between service quality and client satisfaction for projects of higher institutions of learning in Malaysia using 5 attributes of the SERVQUAL model. The result indicated that the reliability factor was the most important variable of service quality while the dimensions of empathy and assurance had significant effect on customer satisfaction. Amankwah *et al.* (2022) assessed the mediating effects of healthcare FM service quality (operationalised into the 5 SERVQUAL dimensions) on patients' satisfaction and overall health care delivery using structural equation modelling. The study revealed that FM service quality mediates the relationship between patients' satisfaction and three of the five dimensions of healthcare quality delivery.

2. 4 Summary of knowledge gaps.

While the relationship between FM and service quality have been tested in these studies, the review suggests as has been argued by this study, that they have mainly addressed issues of healthcare, hospitals and ports sectors. Besides, none has investigated the relationship between FM services at the strategic, tactical and operational levels of FM functions and service quality performance. This study enlarges the boundaries of extant studies and knowledge by exploring the influence of FM roles at tactical, strategic and

operative levels on service delivery performance in Nigeria's corporate environment using the SERVQUAL model. FM has continued to make tremendous impact within the Nigeria's private sector including the banking sector. This is attributable to numerous improvements introduced by the Nigerian Central Bank targeted at reinforcing the viability of banks in the country. Adeleye *et al.* (2004), Alaofin (2003), Opaluwah (2005) and Ikediashi and Ekanem (2015) have reported key FM services in Nigeria's FM industry including the banking sector to include "I.T, personnel training and recruitment, information services, premises management and support services. Support services comprise mail services, fleet car, catering, and reception, house-keeping, office administration, furniture, refuse disposal, reprographics, security, stationery, travel, vending, power supply, water supply, land maintenance and laundry. Although Nigeria's corporate world has made remarkable progress in FM, the dearth of empirical research in this area makes this study highly justified and worthy of investigation.

3. RESEARCH METHODOLOGY

3.1 Research design and theoretical framework.

The study adopted exploratory and quantitative cross-sectional survey research design involving the use of structured questionnaire to achieve stated objectives. The approach was adopted because bias errors are likely to be drastically low while it would be faster, cheaper and ensures easier facilitation of analysis (Creswell, 2009). A taxonomy of variables drawn from the literature (Kincaid, 1994; Chotipanich and Lertariyanum, 2011 Aluko *et al.*, 2021a; Aluko *et al.*, 2021b, Ikediashi *et al.*, 2015; Amankwah *et al.*, 2022; Aga and Safkli, 2007; Ismail *et al.*, 2012; Parasuraman *et al.*, 1998; Futcher *et al.*, 2004; Cronin and Taylor, 1994; Sureshchandar *et al.*, 2002 Patanapiradej, 2012; Jensen, 2011; Barrett, 2000; Ikediashi and Ekanem, 2015; Arcarnari and Capaldo, 2005; Kamarazaly, 2007; Alexander, 1996; Then, 1999; Then and Akhlaghi, 1990, Then, 2003) provided the theoretical basis for situating the research problem of the study. In all, 15 variables grouped into 3 FM roles were subjected to the views of 60 respondents who are mainly staff of the banks while 22 variables grouped into 5 SERVQUAL dimensions were subjected to the views of 140 respondents including 80 customers of the banks.

3.2 Data collection

The method of data collection was a structured questionnaire. The questionnaire was in three sections. The first section focused on the demography of respondents while the second section focused on FM roles (strategic, tactical and operational). For section 2, respondents were asked to rate the level of importance attached to the roles in their organisations using the 5 point Likert scale of $1 = \text{very low } 2 = \text{low } 3 = \text{moderate} \quad 4 = \text{high} \quad 5 = \text{very high}$. The third section of the questionnaire focused on service quality performance of the FM service at the three FM roles while respondents were asked to rate their level of satisfaction of the services using a 5 point Likert scale of $1 = \text{not satisfied} \quad 2 = \text{poorly satisfied} \quad 3 = \text{moderately satisfied} \quad 4 = \text{satisfied} \quad 5 = \text{very satisfied}$. The cross-sectional study was carried out between July and September, 2021.

3.3 Population and sample

The population frame of the study was identified through a pilot study. The pilot study was carried out to establish through official channels of the Central Bank of Nigeria and the Nigerian Stock Exchange, top rated banks in terms of asset turnover, profit before tax and earnings per share capital. Twenty (20) banks were selected based on these criteria. However, 14 of them have standard FM departments headed by a facilities manager or director. The population frame (target respondents) was therefore drawn from bank executives, staff and users of FM services in the 14 banks whose corporate headquarters are in Lagos. Lagos was selected because it is the commercial and industrial hub of Nigeria. Sample refers minimal component of the population studied in order to draw inferences (Udofia, 2011). For the purpose of this study, it was

difficult to obtain a true sample frame for the survey as none of the banks was willing to provide the nominal roll for their staff. Besides, the study also covered customers of the banks who are also users of FM services in the banks. It was therefore decided to purposively administer the questionnaire to 25 respondents in each bank to give a total of 350 sample units. Target respondents were in 4 categories namely management staff, bank staff, FM supervisors, and bank customers. The breakdown of the sample units for each bank is shown in Table 3.

Position of table 3

Purposive sampling was used to administer the questionnaire. The principal consideration in adopting purposive sampling is the judgment of the researcher as to who are willing to participate and render the most appropriate information to realise the goals of this research. The researcher used face-to-face administration of copies of the questionnaire to target respondents who were ready to contribute to the research and who were deemed appropriate to provide the needed data and to share related expertise with the researcher. This formed the background in which 350 copies of the questionnaire were administered to the respondents spread across 14 banks identified during the pilot survey. A breakdown of number administered, number of valid responses returned and response calculation is shown in Table 4. *Position of table 4*

3.4 Reliability and validity checks

Reliability is defined by Easterby-Smith *et al.* (2008) as the extent to which the data collection tool as well as tools deployed for analysis yield consistent findings. Alpha values greater than 0.7 are deemed sufficient (Pallant, 2010). Cronbach's alpha was therefore used in this study to examine the internal consistency of the scales. Table 5 indicates that all scales used for the study are reliable.

Position of table 5

To test for content validity of the research instrument, draft copies of the questionnaire were first administered through another pilot to a group of experts (5 academic and 5 FM practitioners). It was carried out to ensure the contents of the questionnaire are clear, relevant and free of any ambiguity (Saunders *et al.*, 2009). Revisions based on outcome of the content validity exercise included adjustment of some variables to soothe the bank services such as "assurance that respondent's bank transactions are safe (SA2)".

3.5 Research hypothesis

Three hypotheses were postulated to guide the study. The first hypothesis states that there is no significant difference in the perception of respondents on extent of use of FM roles in the study organisations. The second hypothesis states that there is no significant difference in the perception of respondents on service quality performance in the organisations. The third hypothesis states that there is no significant correlation between extent of use of FM roles and service quality performance in the organisations. Hypotheses one and two were tested using Kruskal Wallis while hypothesis three was determined using Spearman's rank correlation.

3.6 Data analysis

Data collected were analysed using the following statistical tools: First, *descriptive* (mean score index) was used to determine the extent of use of FM roles in the study organisations and the level of service quality performance in the organisations before they were ranked for the groups and presented in tables. Secondly, *Spearman's Rank Correlation* determined the correlation between FM roles and service quality performance in the study organisations. Thirdly, *Kruskal Wallis* test was used to determine hypotheses one and two. The decision rule for Kruskal Wallis test statistic is to accept a null hypothesis if the significance of the asymptotic p-value is greater than 0.05 and to reject if significance of the asymptotic p-value is less than 0.05.

4. RESULTS AND DISCUSSION OF FINDINGS

4.1 Demography of Respondents

Table 6 shows demography of respondents that participated in the survey. It indicates that 75 or 53.6% of the respondents were male while 65 or 46.4% were female. In terms of educational qualification, 8 were OND holders, 59 were HND holders, while 73 were BSc holders. In term of years of experience, 27 had between 1-10 years of experience, while 33 of 60 responses had between 10-20 years of experience. It is worth noting that 60 out of the 140 respondents are members of staff of the 14 banks. In terms of career level in their organisations, 14 staff or 23.3% of the 60 respondents were management staff (top level managers including FM directors, procurement directors and executive directors in each of the 14 banks), 18 or 30% were at tactical level (middle level facilities managers and operations managers) while 28 or 46.7% were at the operational level (mainly FM supervisors). The result also shows that 14 management staff representing the 14 banks completed and returned their responses while 32 operational staff, 14 FM supervisors and 80 customers of the banks participated in the survey.

Position of table 6

The result indicates that most respondents are male while all staff are educated and experienced to give relevant and reliable information needed for the study.

4.2 Mean score ranking of extent of application of FM roles by management staff, bank staff and FM supervisors

The first objective is to evaluate the extent of use of FM roles (strategic, tactical, and operational FM) in the banking sector. Fifteen (15) variables categorised into strategic, tactical and operational were extracted from an in-depth literature review. These were then subjected to the views of 60 staff of the banks spread across the three levels of management. They were asked to rate extent of use of FM for the roles in their organisations using a five-point Likert scale (see scale parameters in section 3.2 of methodology section). The result of analysis in shown in Table 7.

Position of table 7

It shows that at the **strategic role**, strategic facilities plan (SFP) was ranked first by management staff and bank staff but ranked second by FM supervisors. It has a mean score of 4.51 from the management staff, 4.69 from other bank staff and 4.48 from FM supervisors. The second ranked function under the strategic role by management staff and bank staff is the I.T plan with mean score of 4.31 and 4.43 respectively while it is ranked first by FM supervisors with a mean score of 4.58. For the **tactical role**, resource management is ranked first by all the three groups of stakeholders with mean value of 4.48, 4.69 and 4.51 from management staff, bank staff and FM supervisors respectively. At the **operational role**, "implementations" is ranked first by all the groups with mean values of 4.48, 4.68 and 4.52 from management staff, bank staff and FM supervisors respectively.

However, the result also indicates that on **average**, strategic facilities plan (mean = 4.56), IT planning strategy (mean = 4.44), and real estate decisions (mean = 3.64) were the top three ranked roles at the **strategic level**, while investment appraisal (mean = 2.32) was the least rated. At the **tactical level**, resource management (mean = 4.56), database control (mean = 4.38), and planning change (mean = 3.54) were the top three ranked roles while setting standards (mean = 3.39) was the least rated. At the **operational level**, implementations (mean = 4.56), building operations (mean = 4.31), and emergencies (mean = 3.49) were the top three ranked roles while audits (mean = 2.36) was the least rated.

4.2.1 Significant differences in the ranking of extent of application of FM roles among the management staff, bank staff, and FM supervisors

The first hypothesis is to ascertain if the observed differences in the extent of application of FM roles among the three group of respondents is statistically significant and that the difference does not occur by chance. The determination of this hypothesis involved Kruskal Wallis test. The validity of the Kruskal Wallis test statistic was to accept a null hypothesis if the significance of the asymptotic p-value is greater than 0.05 and to reject if significance of the asymptotic p-value is less than 0.05. The Kruskal Wallis test result on the 15 FM roles used for the study is presented in Table 8.

Position of table 8

The test indicates that all the 15 FM roles had their p-values above 0.05 (ranged from 0.099 and 0.984); hence there is no significant difference in their rankings among the respondents. The hypothesis was accepted.

4.3 Mean score ranking of user satisfaction of FM service quality by management staff, bank staff, FM supervisors and bank customers

The second objective of this study assessed the satisfaction of stakeholders including bank customers on service quality performance of FM functions at the strategic, tactical and operational levels. Twenty two factors identified from the literature (please see table 2) were presented to respondents to evaluate using a 5 point Likert scale. The result is resented in Table 9.

Position of table 9

The result indicates that under *Tangibles* SERVQUAL indicator, "visual appealing materials associated with service" is the first ranked factor across all stakeholders in the four groups with mean score of 4.40, 4.13, 4.35 and 4.76 from management staff, bank staff, FM supervisors and bank customers respectively. For *Reliability* indicator, "insisting on error free records" was also top ranked bearing mean score of 4.41, 4.38, 4.38 and 4.31 from management staff, bank staff, FM supervisors and bank customers respectively. For *Responsiveness* indicator, "never too busy to respond to requests" was rated first by bank staff and FM supervisors with mean score of 3.11 and 3.44 respectively; while "willing to offer help" was rated first by management staff and bank customers with mean core of 3.50 and 3.18 respectively. For Assurance indicator, "having the knowledge to answer questions" was ranked first by all the 4 groups. It has mean score of 3.23, 3.18, 3.14, and 3.21 from management staff, bank staff, FM supervisors and bank customers respectively. For Empathy SERVQUAL indicator, "giving individualised attention" was ranked first by all the groups. It has a mean score of 3.29, 3.30, 3.36 and 3.29 from management staff, bank staff, FM supervisors and bank customers respectively.

Meanwhile, the result from Table 8 for average scores indicates that "visual appealing materials associated with service" (mean = 4.41) was the top-rated indicator under *Tangibles*, while "up-to-date appearing of equipment" (mean = 2.99) was the least rated. Under *Reliability* of service delivery, "insisting on error-free records" (mean = 4.37) was the top-rated indicator while "prompt in service promised" (mean = 2.03) was the least rated factor. In terms of *Responsiveness* of staff to service, "willing to help" (mean = 3.20) was the top rated while "telling exactly when service will be performed" (mean = 2.59) was the least rated factor. In terms of *Assurance* for good service, "having the knowledge to answer questions" (mean = 3.19) was the top rated while "feeling safe in your transactions" (mean = 2.06) was the least rated. In terms of Empathy, "giving individualised attention" (mean = 3.31) was the top- rated factor in that category while "convenient operating hours" (mean = 2.09) was the least rated. Furthermore, it is worth noting that *Tangibles* was the top ranked group of SERVQUAL indicators by respondents with mean score of 3.39 while *Empathy* was the least rated with mean score of 2.76.

4.3.1 Significant differences in ranking of FM service quality by management staff, bank staff, FM supervisors and bank customers

The second hypothesis is to ascertain if the observed differences in the ranking of 22 FM service quality indicators by management staff, bank staff, FM supervisors and bank customers is statistically significant and that the difference does not occur by chance. The hypothesis was tested using Kruskal Wallis test at 5% significant level. The decision rule is that if the asymptotic p-value is greater than 0.05, the hypothesis is accepted, while the hypothesis is rejected if significance of the asymptotic p-value is less than 0.05. The result is presented in Table 10.

Position of table 10

Table 10 indicates that the two service quality indicators namely "feeling safe in your transaction" and "giving personalised attention" are statically significant. However, 20 other indicators had their p-values above 0.05 threshold (ranged between 0.054 and 0.928); hence there is no significant difference in their rankings among the respondents. This hypothesis is therefore rejected. Expectedly, the plausible source of the significant difference may be attributable to the pair between bank customers who are users of the facilities and bank staff. Arguably, bank customers may not be feeling safe in their transactions with banks ostensibly due to the prevailing economic crisis which has exacerbated a sense of fear among bank customers that all may not be well with their deposits in the banks. Additionally, most bank staff have been found to be notoriously fond of poor interpersonal relationship with their customers to the extent that most do not keep their savings with banks.

4.4 Influence of FM roles on service quality performance

Having examined the extent of application of FM roles and service quality performance, the third objective is to explore the influence of extent of use FM roles on service quality performance of the FM functions. To do this, the role with the highest mean score in each of the categories (strategic, tactical, and operational) was correlated with service quality indicator with the highest mean score in each of the categories (Tangibles, Reliability, Responsiveness, Assurance and Empathy). For instance, the top rated activities that represented each of the roles are strategic facilities plan (strategic), resource management (tactical), and implementations (operational); while the top rated SERVQUAL indicators are Tangibles (Visual appealing materials associated with service), Reliability (Insisting on error free records), Responsiveness (Willing to offer help), Assurance (Having the knowledge to answer questions), and Empathy (Giving individualised attention). Spearman rank correlation was used to test the relationship. It is a non-parametric test used to measure the strength of association (monotonic relationships) between two variables. The correlation coefficient (r_s) has values ranging from -1 to +1 where +1 indicates perfect association and -1 indicates negative association. The value of zero however is an indication of no association while the closer \mathbf{r}_s is to zero, the weaker the association. The statistical significance of correlated results was tested at 5% significance. A null hypothesis was postulated to guide the study and states that there is no significant correlation between FM roles and service quality. The result is presented in Table 11.

Position of table 11

The result in Table 11 indicates that all the pairs had strong correlation. Specifically, the pair of Tactical and Tangibles has a correlation (\mathbf{r}_s) of 0.382, the pair of Tactical and Responsiveness had \mathbf{r}_s of 0.321, while the pair of Strategic role and Tangibles has \mathbf{r}_s of 0.293. The result also shows that p-values for the relationship between Strategic role and Tangibles (p-value = 0.000) and Responsiveness (p-value = 0.010) were less than 0.05. The hypothesis is therefore rejected. However, the p-values for correlation between Strategic role and Reliability (p-value = 0.560), Assurance (p-value = 0.236), and Empathy (p-value = 0.208) were greater

than 0.05. The postulation is accepted for the correlates. Additionally, the p-value for correlation between Tactical role and most of the service delivery factors were less than 0.05. The hypothesis is therefore rejected for all the correlates but one. Tactical role has strong correlation with Assurance (p-value = 0.060). The hypothesis is therefore accepted indicating that there is no significant correlation between Tactical role and Assurance service delivery. Meanwhile, the p-values for correlation between Operational role and Tangibles (p-value = 0.002), Responsiveness (p-value = 0.015), and Empathy (p-value = 0.010) were less than 0.05 significant level. The hypothesis is therefore rejected for the correlated variables. On the other hand, the p-values for correlation between Operational role and Reliability (p-value = 0.104) and Assurance (p-value = 0.162) were greater than 0.05. The hypothesis is therefore accepted.

4.5 Discussion of findings

The findings on the extent of application of FM roles indicates that strategic facilities planning, IT planning, and real estate decisions were the top-rated roles at the strategic level in the organisations. This tallies with previous findings of Barrett, 2000, Adeleve et al. (2004), Adewunmi et al. (2008), and Chotipanich and Lertariyanum, 2011. It affirms the importance of strategic facilities planning as a long-term FM planning process in organisations that links its FM purpose to overall strategic goals and objectives of organisations. In other words, although banks' basic core mandate is that of financial management of funds, the FM strategic plan supports its overall objective of good return on investment for her investors. IT services are the engine rooms for smooth operation of banks. IT planning, being one of the top rated is apt and lends credence to its strategic importance in achieving overall objectives of the banks. At the tactical level, efficient management of resources, proper database control which has relationship with IT planning as well as planning change clearly tallies with previous findings as agents of strategic performance for organisations including banks. At the operational level, implementations, building operations and emergencies were the top-rated roles. This finding aligns with the assertion by researchers (Perera et al., 2016; Ikediashi and Ekanem, 2015; Then, 2003; Patanapiradej, 2012) that proper monitoring and implementation of policies and instructions issued from the board room and tactical level by the supervisors and low-level managers cannot be overemphasised. This is in addition to building operations that flows from real estate decisions at the strategic level.

The findings on service quality performance in the study organisations indicates that visual appealing of materials associated with services (Tangibles), insisting on error-free records (Reliability), willing to help (Responsiveness), having the knowledge to answer questions (Assurance), and giving individualised attention (Empathy) were the top rated in each of the service categories. In agreement with previous studies (Parasuraman *et al.*, 1988; Ventuvuori and Lehtonen, 2006; Amankwah *et al.*, 2022; Aluko *et al.*, 2021a), organisations including banks have a duty of care to match expectations (their performance levels) with performance of these services (perceptions). In other words, this outcome reinforces the assertion, that issues that have to deal with materials associated with services, records and attention to customers must be giving priority in the banks. It is however striking to observe that "feeling safe in your bank transactions" was one of the least rated. This outcome could be that respondents were indifferent to issues of safe transactions in the banks. It is also instructive to observe that while tangibles were the top rated, empathy was the least rated. What this probably implies is that respondents are not bothered about empathy when it comes to financial transactions but are more interested in tangibles, reliability of banking operations, and responsiveness of bank staff towards issues affecting welfare of bankers and customers alike.

The third objective aimed to understand the nature of influence of FM roles on service quality performance. Findings indicates that the p-values for correlation between Strategic role of FM and service quality performance in terms of Tangibles, Responsiveness were less than the significant value of 0.05 (5%). The hypothesis postulated is therefore rejected meaning that the correlation is significant. These findings tally with the works of Ismail *et al.* (2012) and Amankwah *et al.* (2022) and confirm that FM roles at the

strategic level influence service quality in organisations. However, the p-values for correlation between Strategic role and Reliability, Assurance, and Empathy were greater than 0.05. The hypothesis is therefore accepted for the correlates. Additionally, the p-value for correlation between Tactical role and most of the service delivery factors were less than 0.05. The hypothesis is therefore rejected for all the correlates but one. Tactical role has strong correlation with Assurance. The hypothesis is therefore accepted indicating that there is no significant correlation between Tactical role and Tangibles, Responsiveness, and Empathy were less than 0.05 significant level. The hypothesis is therefore rejected for the correlated variables. On the other hand, the p-values for correlation between Operational role and Reliability and Assurance were greater than 0.05. The hypothesis is therefore accepted. The different correlation outcomes provide an indication that some FM functions have measurable influence on service quality, while influence of some others on service delivery. The rejection of the hypothesis that there is no significant difference in the perception of respondents on service quality performance is a corroboration that some might not be satisfied with quality of service delivery.

5. CONCLUSION, RECOMMENDATIONS AND IMPLICATIONS

The study has provided insight into the extent of application of FM roles (strategic, tactical, and operational) as well as service quality performance of these roles and the nature of relationship between them using data from Nigeria's banking sector. The study discovered that strategic facilities planning, IT planning strategy, and real estate decisions are the most important functions at the strategic level; resource management, data control, and planning change at the tactical level; and implementations, building operations and emergencies at the operation level. Findings equally revealed that visual appealing of materials associated with services (Tangibles), insisting on error-free records (Reliability), willing to help (Responsiveness), having the knowledge to answer questions (Assurance), and giving individualised attention (Empathy) were the most important quality indicators of the FM services in the banks. Furthermore, the study revealed that strategic FM roles significantly influenced Tangibles, Reliability, and Responsiveness of staff and the services. Besides, Tactical FM roles significantly influenced all service quality indicators except Assurance; while operational FM roles had significant influence on Tangibles, Responsiveness and Empathy.

The study concludes that strategic facilities planning, efficient management of FM resources and implementation of FM policies are the most important roles in the organisations; while "Tangibles" is the most important service quality indicator according to the respondents. The study also concludes that while some FM roles significantly influence service quality performance, some others do not have significant influence on service quality performance of FM services in the banks.

5.1 Significant contributions and implications

The study's significant contribution is threefold. *First*, as acknowledged by Brown and Dant (2008) and Olanrewaju et al. (2021), adding new knowledge through the feeling in of key research gaps constitute significant contribution to knowledge. Accordingly, the study provides more insights about the body of knowledge on FM by exploring nature of influence of FM roles on service quality performance within the Nigeria's FM sector, an area currently under-researched. *Second*, the study has affirmed the continued relevance of SERVQUAL model for FM research by validating some components of the model.

5.2 Practical implications

The study produced profound practical implications. *First*, it has provided stakeholders in FM industry with extent of application of FM roles, user satisfaction on service quality of FM services in the organisations. These hope to guide the organisation in developing blueprint for improved FM service delivery and

ultimately organisations goals and objectives at the long run. It has provided FM practitioners and academics in the teaching of strategic FM, the needed confidence required to bolster FM service delivery. For instance, it has affirmed the continuous integration of FM into the strategic levels of organisations in such a way that FM policies are now incorporated into the strategic objectives of organisations, which will ultimately increase the contribution of FM market to the nation's gross domestic product (GDP).

5.3 Research limitations and future research directions

Meanwhile, the study has some obvious limitations. First, the study was carried out using one strand of enquiry (quantitative survey). A qualitative multi-case study could be conducted to triangulate outcome of this research. Additionally, the study was restricted to Lagos. Other studies could be carried out countrywide to also compare with findings from other climes. In spite of these limitations, the result provides a veritable insight into FM roles and service quality performance that could potentially enhance FM service delivery in Nigeria as well as a guide for further studies.

5.4 Recommendations

The study has some recommendations. First, professional bodies and stakeholders alike should step up advocacy on the need for increased integration of FM into board room management of organisation. Second, government should adopt policies that will encourage incorporation of strategic FM into the curriculum of built environment courses in the nation's universities. Thirdly, stakeholders be encouraged to work on the FM sub-functional and service delivery areas which were found to be less effective in this study. Such areas are spread across the 3 groups of FM roles and 6 dimension of service quality indicators used for this survey. Additionally, the mixed report on correlation of FM roles against service quality performance is an indication that banks should vigorously work to improve on the observed roles so as to change the narrative as a way of engendering trust between customers and banks on one hand, and ensuring improved productivity for the bank staff.

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Code	FM roles	Supporting references
SS1	Investment appraisal	[8], [10]
SS2	Real estate decisions	[7], [9]
SS3	Premises strategy	[2], [6], [11]
SS4	Strategic facilities plan	[6], [12], [14]
SS5	IT planning strategy	[2], [3], [13], [14]
ST1	Setting standards	[1], [3], [13]
ST2	Planning change	[2], [3], [12], [14]
ST3	Resource management	[4], [5], [6]
ST4	Budget management	[2], [3], [12], [14]
ST5	Database control	[5], [7], [9]
SO1	Managing shared facilities	[8], [10], [11]
SO2	Building operations	[11], [12]
SO3	Implementations	[1], [12], [14]
SO4	Audits	[2], [4], [9]
SO5	Database control	[11], [12]

Table 1: Summary of selected studies used as theoretical framework for FM roles

[1] Patanapiradej (2012); [2] Jensen (2011); [3] Barrett (2000); [4] Ikediashi and Ekanem (2015); [5] Ancarani and Capaldo (2005); [6] Kamarazaly (2007); [7] Alexander (1996); [8] Then (1999); [9] Then and Akhlaghi (1990); [10] Then (2003); [11] Ikediashi and Aigbavboa (2018); [12] Chotipanich and Lertariyanum (2011); [13] Perera et al. (2016); [14] Johnson et al. (2008).

Table 2: Summary of selected studies used as theoretical framework for service quality

Code	SERVQUAL indicators	Supporting references				
ST1	Up-to-date appearing of equipment	[2], [3], [13]				
ST2	Visual appealing physical facilities	[1], [4], [5], [14]				
ST3	Well dressed and neat appearing staff	[14], [15], [6], [7]				
ST4	Visual appealing materials associated with	[5], [6], [7]				
	service					
SR1	Prompt in service promised	[1], [2], [5], [13]				
SR2	Sincere interest in solving problems	[12], [11], [7], [5]				
SR3	Right service right at the first time	[[8], [9], [16]				
SR4	Service at the time promised	[13], [14], [15]				
SR5	Insisting on error-free records	[11], [12], [9]				
SRR1	Telling exactly when services will be performed	[10], [8], [9]				
SRR2	Giving prompt service	[2], [3], [13], [14]				
SRR3	Right service right at the first time	[13], [14], [16]				
SRR4	Never being too busy to respond to requests	[15], [16], [4], [8]				
SA1	Confidence instilling behaviour	[6], [7], [8]				
SA2	Confidence instilling behaviour	[5], [13], [14]				
SA3	Being consistently courteous	[5], [11], [15]				
SA4	Having the knowledge to answer questions	[16], [13], [14]				
SE1	Giving individualised attention	[8], [10], [9]				
SE2	Convenient operating hours	[14], [6], [7]				
SE3	Giving personal attention	[2], [6], [13], [14]				
SE4	Having your best interest at heart	[6], [13], [13]				
SE5	Understanding your specific needs	[13], [16], [5], [2]				
[1] Awu	zie, et al. (2021); [2] Aluko et al. (2021a); [3] Aluko	o et al. (2021b); [4] Ikediashi				
and Ekar	and Ekanem (2015); [5] Amankwah et al. (2022); [6] Tannor et al. (2022); [7] Dasandara					
et al. (2022); [8] Abdeen et al. (2022); [9] Perera et al. (2016) [10] Ikediashi et al. (2020);						
[11] Aga	and Safakli (2007); [12] Ismail et al. (2012); [13] Pa	arasuraman et al. (1998); [14]				
Futcher e	et al. (2004); [15] Cronin and Taylor (1994); [16] Sur	reshchandar et al. (2002).				

S/N	Job Description	Sample
1	Management staff	5
2	Bank staff	5
3	FM Supervisors	5
4	Bank customers	10
Total		25

Table 3: Distribution of sample size by job description for each bank

Table 4: Response rate for the survey

Bank	Questionnaire administered	Number returned	Response rate (%)
Bank 1	25	8	32
Bank 2	25	12	48
Bank 3	25	11	44
Bank 4	25	9	36
Bank 5	25	7	28
Bank 6	25	8	32
Bank 7	25	9	36
Bank 8	25	10	40
Bank 9	25	13	52
Bank 10	25	12	48
Bank 11	25	12	48
Bank 12	25	9	36
Bank 13	25	10	40
Bank 14	25	10	40
Total	350	140	40

Table 5: Reliability analysis

Description	Cronbach's alpha	Number of items
FM roles	0.821	15
Services delivery performance	0.795	22

Table 6: Sample characteristics of respondents

Characteristics	Frequency	Percentage (%)
Sex		
Male	75	53.6
Female	65	46.4
Total	140	100
Educational qualification		
OND	8	5.7
HND	59	42.1
BSC	73	52.1
Total	140	100
Years of experience		
1-10 years	27	45.0
10-20 years	33	55.0
Total	60	100
Career level in your organisa	ition	
Strategic	14	23.3
Tactical	18	30.0
Operational	28	46.7
Total	60	100
Category		
Management staff	14	10
Bank staff	32	22.9
FM Supervisors	14	10
Customers	80	57.1
Total	140	100

Table 7: Facilities management roles

Code	FM roles at strategic, tactical and operational levels	Manager	nent staff	Bank staff		FM supe	ervisors	Average	
	operational levels	N =	= 14	N =	32	N =	14	N =	= 60
	-	mean	rank	mean	rank	mean	rank	mean	rank
Strateg	țic								
SS1	Investment appraisal	2.21	5	2.24	5	2.51	4	2.32	5
SS2	Real estate decisions	3.34	3	4.10	3	3.48	3	3.64	3
SS3	Premises strategy	2.46	4	2.36	4	2.32	5	2.38	4
SS4	Strategic facilities plan	4.51	1	4.69	1	4.48	2	4.56	1
SS5	IT planning strategy	4.31	2	4.43	2	4.58	1	4.44	2
Tactica	al								
ST1	Setting standards	3.31	5	3.42	4	3.44	4	3.39	5
ST2	Planning change	3.56	3	3.04	5	3.42	5	3.54	3
ST3	Resource management	4.48	1	4.69	1	4.51	1	4.56	1
ST4	Budget management	3.55	4	3.38	3	3.48	3	3.47	4
ST5	Database control	4.35	2	4.37	2	4.40	2	4.38	2
Operat	ional								
SO1	Managing shared facilities	2.41	4	2.33	4	2.31	4	2.35	4
SO2	Building operations	4.29	2	4.31	2	4.33	3	4.31	2
SO3	Implementations	4.48	1	4.68	1	4.52	1	4.56	1
SO4	Audits	2.15	5	2.31	5	2.62	5	2.36	5
SO4	Emergencies	3.44	3	3.39	3	3.64	2	3.49	3

Code	FM roles at strategic, tactical and operational levels	MS	BS	FMS	Chi square	p-value
	-	Mean rank	Mean rank	Mean rank		
SS1	Investment appraisal	58.43	74.51	71.97	4.633	0.099
SS2	Real estate decisions	65.92	65.96	71.00	0.618	0.734
SS3	Premises strategy	68.22	67.03	68.42	0.031	0.984
SS4	Strategic facilities plan	64.95	71.13	68.62	0.557	0.757
SS5	IT planning strategy	70.43	59.72	71.08	2.267	0.322
ST1	Setting standards	63.46	63.71	74.45	2.830	0.243
ST2	Planning change	61.14	69.59	73.59	3.261	0.196
ST3	Resource management	67.99	64.93	69.91	0.374	0.829
ST4	Budget management	71.25	58.82	70.95	2.672	0.263
ST5	Database control	69.23	70.72	65.29	0.517	0.772
SO1	Managing shared facilities	65.13	71.87	68.01	0.652	0.722
SO2	Building operations	62.59	72.68	69.64	1.664	0.435
SO3	Implementations	69.18	66.81	67.75	0.087	0.958
SO4	Audits	64.84	69.21	69.90	0.504	0.777
SO5	Emergencies	62.37	71.53	70.53	1.629	0.443
MS= ma	nagement staff; BS=bank staff; FMS=F	M supervisors				

Table 8: Kruskal Wallis test result on the rankings of the facilities management roles by respondents

Code	Service delivery indicators	Manager	nent staff	Bank	staff	FM sup	ervisors	Bank cu	stomers	Ave	rage
		N =	= 14	<u>N</u> =	= 32	<u>N</u> =	= 14	N =	= 80	$\mathbf{N} =$	140
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
Tangib	les (Group mean = 3.39)										
ST1	Up-to-date appearing of equipment	2.89	4	2.91	4	3.01	3	3.15	2	2.99	4
ST2	Visual appealing physical facilities	3.05	2	3.20	3	3.00	4	3.11	3	3.09	2
ST3	Well dressed and neat appearing staff	3.04	3	3.16	2	3.06	2	3.02	4	3.07	3
ST4	Visual appealing materials associated with service	4.40	1	4.13	1	4.35	1	4.76	1	4.41	1
Reliabi	lity (Group mean = 3.37)										
SR1	Prompt in service promised	1.98	5	2.00	5	2.13	5	2.01	5	2.03	5
SR2	Sincere interest in solving problems	3.99	2	4.07	2	4.01	2	4.17	2	4.06	2
SR3	Right service, right at the first time	3.21	3	3.39	3	3.08	3	3.24	4	3.23	3
SR4	Service at the time promised	3.11	4	3.28	4	2.99	4	3.28	3	3.14	4
SR5	Insisting on error free records	4.41	1	4.38	1	4.38	1	4.31	1	4.37	1
Respon	siveness (group mean = 3.07)										
SRR1	Telling and responding to services	2.88	4	2.81	4	2.85	4	2.90	4	2.86	4
SRR2	Providing prompt service	3.01	3	3.10	2	2.98	3	3.06	2	3.04	3
SRR3	Willing to offer help	3.50	1	2.91	3	3.21	2	3.18	1	3.20	1
SRR4	Never being too busy to respond to requests	3.21	2	3.11	1	3.44	1	3.00	3	3.19	2
Assura	nce (Group mean = 2.88)										
SA1	Confidence instilling behaviour	3.01	3	3.11	3	3.08	3	3.12	3	3.08	3
SA2	Feeling safe in your transaction	2.01	4	2.08	4	2.05	4	2.10	4	2.06	4
SA3	Being consistently courteous	3.18	2	3.15	2	3.16	2	3.19	2	3.17	1
SA4	Having the knowledge to answer questions	3.23	1	3.18	1	3.14	1	3.21	1	3.19	2
Empat	hy (Group mean = 2.76)										
SE1	Giving individualised attention	3.29	1	3.30	1	3.36	1	3.29	1	3.31	1
SE2	Convenient operating hours	2.08	5	2.13	4	2.11	4	2.04	4	2.09	5
SE3	Giving personal attention	3.14	2	3.11	5	3.18	2	3.21	2	3.16	2
SE4	Having your best interest at heart	3.01	3	3.26	2	3.11	3	3.14	3	3.13	3
SE5	Understanding your specific needs	2.09	4	2.24	3	2.12	5	1.99	5	2.11	4

Table 9: Result of analysis for state of FM service delivery

Code	Service delivery indicators	MS	BS	FMS	CUS	Chi square	p-value
		Mean rank	Mean rank	Mean rank	Mean rank	1	
ST1	Up-to-date appearing of equipment	77.16	64.30	78.56	87.36	3.948	0.817
ST2	Visual appealing physical facilities	72.71	59.31	56.28	61.93	1.964	0.847
ST3	Well dressed and neat appearing staff	66.74	57.23	74.44	89.93	2.165	0.698
ST4	Visual appealing materials associated with service	70.29	62.12	72.94	79.50	2.189	0.701
SR1	Prompt in service promised	71.91	61.33	63.33	87.66	4.808	0.308
SR2	Sincere interest in solving problems	71.82	59.38	68.11	89.43	5.558	0.235
SR3	Right service, right at the first time	74.84	58.36	54.83	86.86	8.236	0.083
SR4	Service at the time promised	68.16	59.38	91.56	95.43	9.815	0.054
SR5	Insisting on error free records	73.31	57.90	79.61	53.57	6.461	0.167
SRR1	Telling and responding to services	70.86	69.60	55.67	91.57	13.952	0.828
SRR2	Providing prompt service	67.45	70.37	60.61	78.43	3.366	0.499
SRR3	Willing to offer help	70.78	60.39	74.50	80.86	8.044	0.090
SRR4	Never being too busy to respond to requests	70.13	65.92	74.78	95.43	3.089	0.426
SA1	Confidence instilling behaviour	68.35	71.71	53.94	87.61	1.928	0.928
SA2	Feeling safe in your transaction	70.93	64.95	74.11	101.93	10.964	0.027*
SA3	Being consistently courteous	67.88	71.69	53.94	66.14	1.572	0.814
SA4	Having the knowledge to answer questions	67.18	64.94	76.44	80.43	1.287	0.864
SE1	Giving individualised attention	66.79	72.91	60.61	69.93	7.928	0.094
SE2	Convenient operating hours	75.62	62.48	57.56	70.29	9.496	0.064
SE3	Giving personal attention	74.24	53.85	79.00	61.86	11.895	0.018*
SE4	Having your best interest at heart	74.10	52.64	87.67	61.79	5.760	0.218
SE5	Understanding your specific needs	73.76	60.63	56.89	82.70	6.231	0.096
MS= ma	anagement staff; BS=bank staff; FMS=FM supervisors	s; CUS=bank c	ustomers				

Table 10: Kruskal Wallis test result on the rankings of the service delivery indicators by respondents

Correlated variable	R-value (r _{s)}	P-value	Decision					
Strategic (Strategic facilities Plan)	· · · · ·							
Tangibles	0.293	0.000	Reject					
Reliability	0.250	0.006	Reject					
Responsiveness	0.216	0.010	Reject					
Assurance	0.101	0.236	Accept					
Empathy	0.107	0.208	Accept					
Tactical (Resource management)								
Tangibles	0.382	0.000	Reject					
Reliability	0.211	0.012	Reject					
Responsiveness	0.321	0.000	Reject					
Assurance	0.159	0.060	Accept					
Empathy	0.297	0.000	Reject					
Operational (Implementations)								
Tangibles	0.257	0.002	Reject					
Reliability	0.138	0.104	Accept					
Responsiveness	0.204	0.015	Reject					
Assurance	0.119	0.162	Accept					
Empathy	0.216	0.010	Reject					
Note: r_s = spearman rank correlation coefficient; p-value = level of significance at 95 % level (p>0.05)								

Table 11: Result of correlation analysis between FM roles and FM service delivery