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# INNOVATIVE AND QUALITY-ENHANCING CAPABILITIES AS TOOLS FOR ATTAINING COMPETITIVE ADVANTAGE AMONG MEDIUM-SIZED ENTERPRISES IN JUBA, SOUTH SUDAN

*[1*] Malok Daniel Deng[1], [2] Charity C.W. Muraguri[2] & [3] Peter Kiriri*
*[1,2,3] United States International University –Africa, Nairobi, Kenya*
*Correspondence Email: dmalok50@gmail.com[1]*

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## ABSTRACT

The first objective of this study was to establish the effect of innovative capabilities on the competitive advantage of MSEs in Juba, South Sudan. The second objective was to examine the influence of quality-enhancing capabilities on the competitive advantage of MSEs in Juba, South Sudan. The resource-based theory, dynamic capability theory and the competitive advantage theory anchored the study variables. This study adopted a descriptive design, enabling the researcher to apply statistical data analysis techniques. The study adopted proportionate stratified and simple random sampling techniques in order to address the absence of homogeneity between the different strata of the sectors of the MSEs. The target population was 491 MSEs operating in Juba, South Sudan. Yamane formula was used to calculate the sample size of 246 MSEs. Questionnaires were used to collect data that was analysed using descriptive statistics and multiple linear regression. The results indicated that there was positive and statistical significance between innovative capability and the competitive advantage of MSEs in Juba, South Sudan ($\beta = 0.817$, $t = 11.165$, $p < 0.05$). The results also found that there was a positive and statistical signification between quality-enhancing capabilities and the competitive advantage of MSEs in Juba, South Sudan ($\beta = 0.329$, $t = 7.227$, $p < 0.05$). Therefore, the study concluded that innovative and quality-enhancing capabilities were important factors influencing competitive advantage among MSEs in Juba, South Sudan. The study recommended that managers of MSEs in Juba, South Sudan, should ensure that they continually enhance their innovative and quality-enhancing capabilities. These capabilities could be inculcated and improved through a management culture that promotes innovation and quality amongst their employees through training, mentoring and coaching.

**Key Words:** *Competitive Advantage, Quality Enhancing Capabilities, Innovative Capabilities, Medium-Sized Enterprises, Organisational Capabilities, Juba, South Sudan*

## 1.0 Introduction

Bature, Sallehuddin, and Hin (2018) defined organizational capability as a range of tactics and action plans to out-manoeuvre market rivals. However, Alfawaire and Atan (2021) highlighted that strategic management concern is aligning resources to bring strategic organisational capabilities that bear and gain value from placing resources. The vital organisational

capabilities influencing the medium-sized enterprises (MSEs') competitive advantage are competence-based recruitment, ideas, products, processes and procedures (Wongsansukcharoen & Thaweepaiboonwong, 2023). Trieu, Van Nguyen, Nguyen, Vu and Tran (2023) also observed that the other vital elements contributing to a conducive environment for the MSEs to perform and achieve competitive advantage include regulatory flexibility, financial support and private-public partnerships projects. Moreover, these elements influence innovation in products and services, change management and long-term growth for the MSEs. The researchers further pointed out that firms that harness organizational capabilities enable organisations to thrive in the global market.

According to Bianchi and Stoian (2022), the key organizational capabilities that enable SMEs to drive inbound internationalization in Latin American markets are marketing, innovation, networking, technology and managerial capabilities. Bianchi and Stoian (2022) defined inbound internationalization as the process by which SMEs attract international firms to the local market. Hongyi (2022) argued that organizational capability was crucial to Canadian firms' competitiveness. Further, Barakat, Boaventura, and Gabriel (2022) demonstrated that organizational capabilities were crucial to creating value for stakeholders among the publicly traded firms in Brazil.

According to Cheah and Yuen-Ping (2021), organizational capabilities and open innovation (OI) have played a significant role in alleviating the performance of Chinese public research institutions by enabling the commercialization of their work. Similarly, Chen, Chen, Hsieh, and Lin (2022) noted that Taiwanese organizations were trying to reconfigure themselves to enhance their performance and focus on organizational capabilities such as research and development (R&D) and marketing capabilities. Najib, Fahma, Abror, and Suhartanto (2022) postulate that SMEs in the Indonesian food-processing industry need to develop green innovation capabilities as their core organizational capabilities for sustainable production. Furthermore, Wu, Yan, and Umair (2023) observed that organisational capabilities like flexibility, skills, innovation, and learning were the capabilities MSEs need to attain a competitive advantage.

Cahyono, Purwoko, Koho, Setiani, Supendi, Setyoko, and Wijoyo (2023) demonstrated that organisations which achieve sustained competitive advantage fully deploy their organisational capabilities and integrate them into the supply chain process. According to Cahyono *et al.* (2023), MSEs in Indonesia deployed a mix of capabilities to achieve a competitive advantage. These capabilities included deploying cross-functional teams, supply chain integration, relationship management, cost reduction, communication, real-time information sharing, product innovation, competitive pricing and dependability in the delivery of products and services. Open innovation and organisational learning were the critical organisational capabilities needed for MSEs to perform and achieve competitive advantage among manufacturing firms in the United Arab Emirates (Al Nuaimi, Singh & Ahmad, 2024). However, Al Nuaimi, Singh and Ahmad (2024) pointed out that these capabilities can only achieve competitive advantage if they are geared to enhance profitability and marketing effectiveness.

Empirical research around Africa also pointed to the role of organizational capabilities such as innovation plans for delivering products and services and their ability to achieve competitive advantage. Otache (2024) concurred by stating that the critical organisational capabilities of innovation and strategic capability were crucial for the competitive advantage of MSEs in Nigeria. Okangi (2024) emphasised that the key capabilities that positively affected the export abilities of MSEs in Tanzania were product quality innovation. These capabilities were, therefore, critical in enabling MSEs to contribute to national and global economic growth and development. Mady, Halim, and Omar (2021) indicated that research demonstrated that MSEs

in Egypt configured resources and organisational capabilities to achieve sustainable competitive advantage in the manufacturing sector. These capabilities included technical and organisational learning, knowledge management, and strategic environmental capabilities like eco-innovation and green absorptive capacity. Chabbouh and Boujelbene (2023) indicated that open innovation and dynamic capabilities like appropriation, absorptive and dynamic significantly impacted the performance and competitive advantage of MSEs in Tunisia. Additionally, Anugwu, Nwosu and Okoli (2021) stated that skilled human resources are the key organizational capability that positively affects small and medium enterprises (SMEs). The researchers found that the performances of 52% of the SMEs in Anambra State in Nigeria were negatively affected by the lack of this capability.

According to Liu (2018), no single global definition of micro, small and medium-sized enterprises (MSMEs) exists. However, Twijnstra and Hilhorst (2017) defined SMEs as small enterprises with five to nineteen personnel and MSEs with twenty to ninety-nine personnel. According to the South Sudan National Bureau of Statistics (SSD-NBS), MSEs in the country are defined as having six to nine employees, comprising 6% of enterprises operating in the country (SSD-NBS, 2020). Mittal, Rawat and Aggarwal (2017) found that MSMEs employ 45% of the global workforce in high-income economies. Mittal, Rawat and Aggarwal (2017) added that SMEs accounted for 40% of highly innovative companies in 2002 and are essential to the national competitiveness of an economy. Nongolola (2020) argued that MSMEs could find success challenging if they do not apply strategies that render a competitive advantage. The ability and knowledge of MSME managers to understand the environment in which they operate and make strategic decisions are vital to the growth and development of their enterprises. The ability for managers of MSEs to understand their resources in terms of their innovative and quality-enhancing capabilities.

The role played by SMEs in the growth and development of economies is now primarily acknowledged (Muathe, 2010). Understanding how firms improve their performance to achieve competitiveness should concern all stakeholders in countries keen on economic growth. Muathe (2010) found that SMEs face growth challenges because they operate simultaneously in the global and local markets, which makes innovation imperative.

Hock-Doepgen, Clauss, Kraus and Cheng (2021) argued that innovation is driven by knowledge management and ICT, which could enable SMEs to enter new markets and increase their competitive advantage. The socio-economic development aspirations of the South Sudan Vision 2040 (Joint Donor Team, 2011), which promotes the social and economic development of South Sudan, are difficult to attain without the deployment of critical strategic management thinking geared towards attaining sustained competitive advantage. South Sudan's legal and institutional framework is undeveloped and has no clear articulation of policies in dialogue with the private sector (World Bank, 2009). According to Twijnstra and Hilhorst (2017), South Sudan is in a post-conflict state and is viewed as fragile and unpredictable when conducting business. The challenges of political stability to the South Sudan economy were compounded by the COVID-19 pandemic, making MSMEs struggle to survive globally (Rwigema, 2020).

Rathore, Jakhar, Bhattacharya, and Madhumitha (2018) postulated that the ability to acquire and sustain an innovative strategy in terms of the iterative and recursive framework (manoeuvrability) was crucial to the performance of MSEs. Suharto and Subagja (2018) reported that when business innovation was combined with entrepreneurial orientation and market orientation, MSEs in the batik industry of West Java in Indonesia achieved a competitive advantage. When SMEs operate in the high-end market, they should be innovative regarding their services, products, and processes (Sutapa, Mulyana & Wasitowati, 2017). Von Krogh, Netland, and Wörter (2018) stated that OI is one of the best ways organizations in the manufacturing sector can benefit from getting new ideas for process innovation. Yu, Shi, You

and Zhu (2021) found that developments in the R&D stage influenced organisational process innovation, leading to an increased commercialisation index for firms in China. Yu, Shi, You and Zhu (2021) illustrated that organisational process innovation led to increased market share and growth in stagnating markets and for those experiencing intense competition.

Van Kemenade and Van der Vlegel-Brouwer (2019) elaborated that quality management can be viewed from three diverse schools of thought or paradigms, and they could be normative, empirical or reflective. El Haddad (2019) observed that service quality was a function of customer perception, expectation, and service delivery. Potkany, Gejdoš, Lesnikova and Schmidtova (2020) affirmed that the quality of management processes and practices was important to customer satisfaction and producing quality goods and services. Sousa and Nunes (2019) noted that quality needs to be discussed within parameters critical to quality (CTQ) and statistical process control (SPC). However, Sousa and Nunes (2019) affirmed that quality is measured using data derived from process variations, system measurement errors, repair, defect, and inspection costs. Nikiforova (2020) elaborated that the quality of data determines the quality of the product of its application. According to Nika (2020), quality concern-based research is the best approach to delivering a good or service. Uvenc and Kulluk (2020) argued that service quality should be measured. Organisations should adopt quality-enhancing capabilities that are service provider- and customer-oriented. However, Kravchenko (2021) cautioned that quality, as a performance yardstick, could not be discussed without quality identification, evaluation, and assurance.

### 1.2 Statement of the Problem

Past research by Chundu, Pindiriri, and Kaseke (2020) affirmed that despite MSMEs comprising about 98% of private-sector firms in Sub-Saharan Africa, they lack growth and are susceptible to a high failure rate. Small and Medium Enterprises (SMEs) have a business cycle that includes initiation, growth and maturity; however, they all experience the Death Valley curve, so external support is vital at this stage (Maulina, Muftiadi & Rasmini, 2020). Jegadeeswari, Sudarvel and Velmurugan (2020) observed that managerial efficacy, innovation, opportunity identification, tolerance during downturns, risk-taking, and financial control are crucial for the survival of MSMEs. However, Nwankwo and Kanyangale (2020) postulated that entrepreneurial orientation is the fulcrum on which the death or survival of MSMEs depends. Moreover, empirical research has demonstrated that firms can only thrive and grow if they establish a sustainable competitive advantage; as noted by Hasibuan and Hidayat (2021), there is a direct correlation between investor business strategy and SME policy in a country. Onyeje, Court and Agbaeze (2022) found that in Nigeria, a clear national policy supports the development of MSMEs and has a positive effect on their development and sustainable growth. The findings were consistent with Rahman and Khondkar's (2020) observation that for a country to develop rapidly, it should have clear policies regarding SMEs that focus on reducing poverty, enabling industrialization, and improving literacy. Roundy and Fayard (2019) argued that SMEs are crucial to policymakers because they help in decision-making processes and are essential contributors to national income, innovation, and job creation. However, despite the interest of policymakers in entrepreneurs and their contribution to national economies, minimal research on their ecosystems has not been conducted in South Sudan; few studies were conducted in other countries. Given that no country has the same business environment, an empirical study was needed to focus on organizational capabilities in South Sudan. This study investigated the effect of innovative capabilities and quality-enhancing capabilities on the competitive advantage of medium-sized enterprises (MSEs) in Juba, South Sudan.

### 1.3 Objectives of the Study

i. To establish the effect of innovative capabilities on the competitive advantage among MSEs in Juba, South Sudan.
ii. To examine the influence of quality-enhancing capabilities on the competitive advantage among MSEs in Juba, South Sudan.

## 2. Literature Review

### 2.1 Theoretical Review

The resource-based view (RBV) began with the writings of Penrose in 1959. Penrose argues that an organisation is a bundle of resources (Kessler, 2013). Lose (2021) attributed the development of the resource-based theory (RBT) to Hamel, Prahalad, Grant, and Spender. Wernerfelt (1984) stated that resources may seem to be the same for every firm in the industry; however, how they are bundled creates a competitive advantage. RBT is worth noting based on the internal analysis of a firm's strengths and weaknesses (Barney, 1991). Empirical research in the last 30 years (since 1991) has indicated that the differential performance of firms cannot be explained, in many instances, through economic theories but through RBT (Barney, 2001). Singh, Dey, and Sahay (2020) observed that, from RBT's perspective, resources can constantly be redeployed to meet changing market conditions. However, Kiyabo and Isaga (2019) recognised that RBT has some weaknesses that do not address how strategies are deployed, the processes of creating and acquiring strategic assets, why some enterprises perform in an unpredictable environment, and why others fail. Moreover, the Resource-based theory defines resources widely and ignores external environmental factors (Diin Fitri, Dahlan & Sukardi, 2018).

However, it is important to note that Andersén (2021) demonstrated that RBT has been applied to research related to product innovation. Moreover, RBT's anchoring point of view is that firms can develop distinct resources and capabilities; the resources could always be redeployed to meet changing market conditions. Andersén (2021) demonstrated that RBT has been applied to research on product innovation; RBT's anchoring viewpoint is that firms can develop distinct resources and capabilities. In this study, RBT explains the variables of innovative capabilities. These capabilities are product, process, marketing, and organisational innovation. At the same time, Dynamic capability theory (DCT) is founded on the ability to amalgamate internal organisational capabilities and external competencies to take opportunities in a changing environment and to avoid risk (Teece, Pisano & Shuen, 1997). Teece (2007) explains that dynamic capability is an organisation's ability to integrate all its systems, processes, and procedures.

Moreover, it enables an organisation to respond to the external environment; DCT has a set of capabilities that provide an organisation with the freedom of action in response or reaction to the external environment. Kitenga, Kilika and Muchemi (2020) concur and outline that dynamic capability is the ability to react quickly to the changing market environment. In this study, DCT explains the organisational structure and quality-enhancing capability variables. MSEs' dynamic nature refers to their capacity for swift environmental adaptation. Finally, Teece, Pisano, and Shuen (1997) advance that the theory of competitive advantage and its sustenance is the critical fulcrum of strategic management. Porter (1998) argued that organisations must identify, enhance, and harness their sources of competitive advantage to position themselves in the market. This point justifies the study of the organisational capabilities of MSEs concerning their ability to achieve a competitive advantage. Although competitive advantage has been studied for decades, no consistent conclusions exist on its contribution to business performance (Zhao, Meng, He & Gu, 2019). However, SMEs can achieve national, regional, and global competitiveness if clustered together as economic entities

(Mahendran, Olive & Lavanya, 2020). In addition, quality management among MSMEs impacted their cost leadership and competitive advantage. In this study, competitive advantage theory explains cost reduction capabilities. These capabilities include the ability of MSEs to manage facilities, scales of production, cost control, and cost minimisation.

**2.2 Empirical Review**

Panduru, Neamtu and Neamtu (2020) explained that innovation cannot be viewed within artistic imagination but as a synthesis of abstraction and creative ideas. According to Dhanora, Danish, and Sharma (2021), there are two types of innovation: technological and non-technological. Non-technological innovations include marketing and organisational innovations, and technological ones include process and product innovations (Dhanora, Danish & Sharma, 2021). Bigos and Wach (2021) concurred that the key critical types of innovations are process, product, marketing, and organisational innovation. However, Bigos and Wach (2021) categorised marketing and organisational innovations as soft innovations, whereas product and process innovations are complex. However, Gallegos, Miralles, and Pineda (2021) claimed that much of the focus on innovation has been on high technical innovation in developed economies, whereas minimal focus has been on low innovation research in emerging economies. According to Lee, Lee, Kee, Kwan and Ng (2021), there is also social innovation, which is the environment in which new programmes, processes, services, production methods, or products are introduced to meet new market conditions. Social innovation changes authority flow and old routines and processes (Lee, Lee, Kee, Kwan & Ng, 2021).

Adamides and Karacapilidis (2020) argued that open innovation (OI), from a capability viewpoint, can be seen from a strategic or operational perspective. OI enables firms to operate in a dynamic environment where cognitive processes must be conducted quickly; hence, there will always be knowledge leakages in an OI system due to the conducive knowledge-sharing environment that leads to a competitive advantage. Moreover, there are four types of innovation: process, organisational, product, and administrative. However, this present study focuses only on the three variables of process, product, and organisational innovation.

Bigos and Wach (2021) noted that the impact of various types of innovations, such as process, product, marketing, and organisational innovation, has not been well-studied regarding the promotion of exports by SMEs in developing countries. Markovic, Koporcic, Arslanagic-Kalajdzic, Kadic-Maglajlic, Bagherzadeh, and Islam (2021) argued that SMEs should use COVID-19 as a means of engaging in OI that is business-to-business orientated. Markovic *et al.* (2021) further postulated that COVID-19 allowed SMEs to engage competitors and customers for rapid innovation development. Therefore, companies in the informal sector could increase their competitive intensity by introducing innovative products in markets with weak institutions, small market sizes, and low economic development. However, Markovic *et al.* (2021) noted that informal sector players are likely to provide competition to formal firms when the following four conditions exist in the marketplace: top management inexperience, firms being export-focused, higher regulation, and weak intellectual property protection. Finally, Ellwood and Horner (2020) stated that the role of managers is crucial in the innovation process, especially the time needed to execute it.

Siagian, Tarigan, and Jie (2021) claimed that the product quality that leads to customer satisfaction depends on product variance and supply chain flexibility. Hamilton-Ibama and Ogonu (2019) found that service quality was essential to gaining market share among deposit-taking banks in Nigeria. Hamilton-Ibama and Ogonu (2019) observed that the elements that had a significant and positive effect were responsiveness, tangibles, and customer assurance. Getahun (2019) contended that service quality was essential for achieving customer satisfaction

and competitive advantage among commercial banks in Adama City in the Federal Democratic Republic of Ethiopia. The service quality dimensions among the banks were security, network quality, empathy, and customer responsiveness.

Bakator, Đorđević, Ćoćkalo, Nikolić, Stanisavljev and Terek (2020) observed that the perceived quality of a good or service, credibility development, trust, and brand loyalty are crucial for achieving a competitive advantage. When a firm provides high-quality products, this builds its brand equity. Therefore, product innovation adds customer value and can lead to a competitive advantage. The customers' overall experience with products and the service quality are the key drivers of value and perceived value (Aluko, Idoro & Mewomo, 2020). Innovation and quality are not competing concepts; they complement each other; quality and innovation involve incremental product and service improvements; hence, employees' education and technical skills influence the quality of products and services delivered to customers. Sahoo (2019) argued that the quality standards of goods in manufacturing are crucial due to increased competitive pressures. Sahoo (2019) emphasised that Indian consumers are increasingly seeking quality products and services due to the diverse choices provided by the global market.

Quality of service can be delineated as the difference between what we expect and what we actually receive (El-Borsaly & Hassan, 2020). Service quality is a multifaceted element comprising service setting, time, and situation, among other factors. Therefore, for service excellence to fuse into the manufacturing sector, the sector must adopt service innovation. According to Akhtar, Frynas, Mellahi, and Ullah (2019), the quality of a service or product is measured using various variables. Akhtar, Frynas, Mellahi, and Ullah (2019) mentioned that product quality can be measured using product reliability, product safety and product defective rate; on the other hand, service quality is measured using order flexibility, on-time delivery, and order accuracy. Nguyen, Duong, Guynh, and Trang (2020) stated that when competition is intensive regarding price, product replacement, and product quality, the ability to increase profitability is reduced. This situation is significant because the product quality, service quality, and warranty period must be enhanced and prices lowered (Nguyen, Duong, Guynh & Trang, 2020).

Ali and Naeem (2019) argued that it is important to enhance quality standards by adopting and introducing international quality certification to provide quality services and products. Hence, for a business to perform and achieve a competitive advantage, it should have metrics for measurement that include service and product quality, financial performance, customer satisfaction and operational performance. Ali and Naeem (2019) suggested that businesses adopt international standards, such as ISO 9000 standards, ISO 9001 certification, ISO 9001 products, and SQ, to enhance their business performance and achieve a competitive advantage. Rosillo-Díaz, Blanco-Encomienda, and Muñoz-Rosas (2021) noted that 30 years of studies in Japan between 1989 and 2019 demonstrated that SQ is positively and significantly related to consumer satisfaction. The results affirmed that innovation is important for enhancing products and services, which is key to attaining customer satisfaction and competitive advantage.

### 2.3 Conceptual Framework

The conceptual framework that guided the study is provided in Figure 1, which illustrates the relationship between innovative capabilities, quality-enhancing capabilities and competitive advantage.

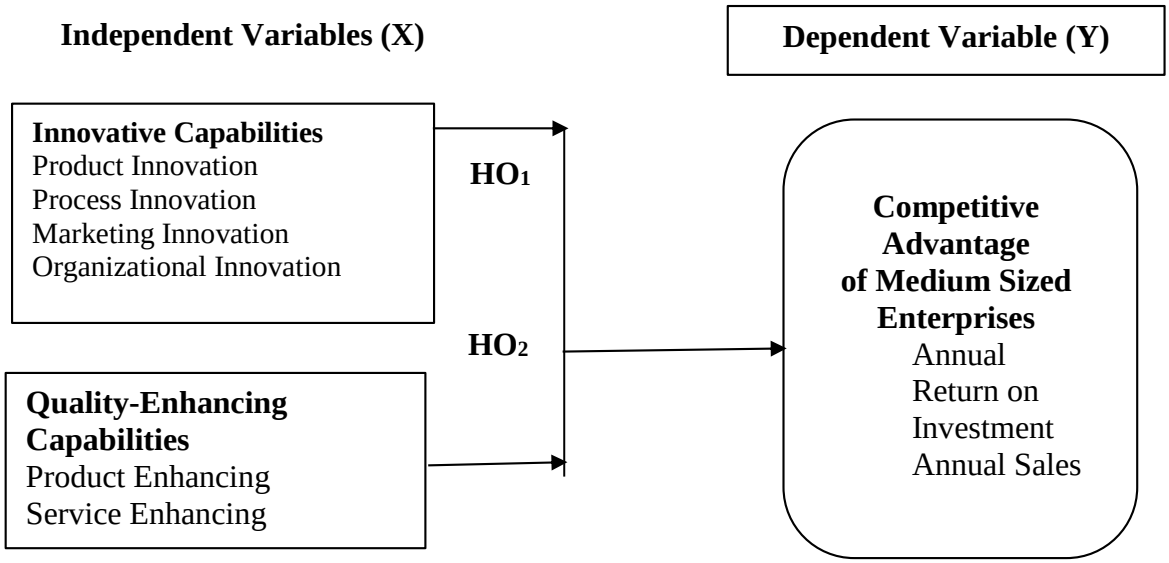


**Figure 1: Conceptual Framework**

Saputra, Rahab, and Najmudin (2022) stated that attaining a competitive advantage cannot be discussed without straightforward tactics for producing quality products and a pricing strategy that leads to increased sales volumes. Firms can attain a competitive advantage by differentiating and positioning themselves through innovation, market orientation, and brand recognition (Rua & Santos, 2022). Hence, firms' quality management practices are crucial to achieving a competitive advantage. Gaining a competitive edge and concentrating on market orientation simultaneously increases market share and boosts company performance (Purba & Indrawan, 2022). This could be attributed to firms identifying fast-moving products with high-profit margins to remain competitive in a rapidly moving market.

Fallon-Byrne and Harney (2017) argued that understanding innovation is essential to comprehending DC. Mohamed, Adam, and Osman (2021) noted that organisational processes enhance organisational innovation when coupled with innovation in SMEs, leading to a competitive advantage. Mady, Halim, and Omar (2021) noted that process and organisational innovation led to sustainable competitive advantage among SMEs in Egypt's manufacturing sector. The findings align with Muisyo, Qin, Ho, and Julius (2021), who stated that green process innovation creates a competitive advantage among manufacturing firms. Daham and Abdelkader (2021) demonstrated that process innovation and organisational structural change significantly and positively impacted the performance of an Algerian telecommunication company in Laghouat. According to Mabenge, Ngorora-Madzimure and Makanyeza (2020), innovation did not significantly influence SMEs' financial and non-financial performance in Harare, Zambia. However, the researchers observed that marketing innovation significantly influenced a firm's performance regarding the four dimensions of innovation. Finally, Gebremichael and Tekle (2020) illustrated that human capital was the most crucial element that led to process innovation and competitive advantage among SMEs in the manufacturing sector in the Tigray Region of the Federal Democratic Republic of Ethiopia. Van Kemenade and van der Vlegel-Brouwer (2019) noted that the quality of an enterprise's goods and services depends on the management's view of quality. Quality of service is important for customer loyalty and customer satisfaction; customer loyalty is influenced when the customer is satisfied

with the quality of service. Therefore, the quality of service and its delivery are crucial differentiators that lead to a competitive advantage.

$HO_1$: Innovative capabilities have no significant effect on the competitive advantage of MSEs in Juba, South Sudan.

$HO_2$: Quality-enhancing capabilities have no significant effect on the competitive advantage of MSEs in Juba, South Sudan.

## 3. Research Methodology

A descriptive design was used for the study. A descriptive study allows the researcher to answer research questions such as how, when, what and where of a study design and enables the traits and patterns of respondents to be accurately established (Fox, Murray, Lesko, & Sealy-Jefferson, 2022). In this study, the independent variables were innovative capabilities and quality-enhancing capabilities. The target population was 491 MSEs registered in Juba, taken from the Integrated Business Establishment Survey (IBES) of 2019 from the SSD-NBS (SSD-NBS, 2020). However, stratified and random sampling techniques were used to select the required sample of 246, which was determined using the Yamane (1967) formula. As Opie and Brown (2019) recommended, data was collected using a questionnaire. Luo and Keefer (2021) noted that questionnaires enable efficient, inexpensive, and quick data collection from respondents. The researcher sought and obtained permission from the South Sudan Ministry of Higher Education and the Internal Review Board (IRB) to conduct the research. The researcher also fully informed the respondents about the research's purpose and use and obtained their consent before administering the instrument. Descriptive and regression analysis was used to analyse the data. The regression analysis was conducted at a 95% confidence interval. The p-value of $\leq 0.05$ was used to determine the statistical significance of the relationship between variables. The linear regression models used were;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

$$Y = \beta_0 + \beta_2 X_2 + \varepsilon$$

Where;
Y= Competitive Advantage.
$\beta_0$ = Constant
$X_1$= Innovative Capabilities
$X_2$= quality enhancing Capabilities
$\varepsilon$ = The error term

## 4.0 Study Results and Discussion

The sample size was 246 MSEs in Juba, South Sudan. The questionnaires were dropped and picked up later after the respondents had filled them. The study collected 244 out of the 246 questionnaires administered. The response rate was 99.2 percent. Khrisat and Alqadi (2022) noted that a 60% response rate is acceptable, and a rate greater than 70% is considered good. Hence, the 99.2 percent was sufficient for further data analysis. The researcher wanted to know the gender of respondents; this was made to assess the gender balance amongst the MSEs operating in Juba. The findings showed that 70.5% were male and 29.5% were female. These findings suggest that MSEs in Juba, South Sudan, were dominated by males.

The age of the respondents was sought as part of the general information. This information was necessary to determine the most common age for owners or managers of MSEs in Juba, South Sudan. The results demonstrated that 36.9% were aged between 25 and 29 years, while 2.9% were over 50. These findings imply that most owners and managers of MSEs in Juba were young and middle-aged. The age of the business in years and the number of employees in the business was 40.6% of the MSEs in Juba had been in operation for 4 to 7 years, while 3.7% had existed for over 15 years. All the surveyed businesses had 6 to 9 employees. These findings imply that most of the MSEs surveyed had been in operation for less than 10 years, which implies a short life of MSEs.

The results of the registration status of the businesses in terms of whether authorities duly indicate that 97.5% of the MSEs were registered, whereas 2.5% were not duly registered. These findings imply that most MSEs in Juba adhere to government regulations regarding registration. The study enquired about the respondents' MSE sectors. The results showed that 41% of the respondents indicated that their MSEs operated in Services and General Trading, while 4.5% of the MSEs operated in mining and quarrying. It is important to note that all the sectors of the economy were represented in the survey.

The estimated annual sales of the MSEs were sought in the study. The findings presented revealed that 29.2% of the MSEs had estimated annual sales of between 10 and 19 million SSP, whereas 8.6% of the MSEs had estimated annual sales of between 30 and 39 million SSP. These findings imply that most MSEs in Juba had revenues below 30 million SSP. Finally, the study sought the estimated total asset cost of the MSEs. The findings indicated that 40.6% of the MSEs had an estimated total asset value of less than 20 million SSP, whereas 12.3% of the MSEs had an estimated asset value of more than 49 million SSP. The findings imply that most MSEs in Juba had assets worth below 30 million SSP.

### 4.1 Competitive Advantage of MSEs in South Sudan

This section analysed the data obtained in response to the dependent variable, which was the competitive advantage of MSEs in Juba, South Sudan. To assess the competitive advantage of MSEs in Juba, study participants were provided with a set of statements relating to annual net income, annual sales turnover, and annual return on investment. They were required to indicate the level of concurrence with statements regarding their MSEs. The participants were instructed to rank their agreement with the stated ideas on a five-point scale (1-5), indicating their level of agreement. The researcher employed mean and standard deviation to examine the responses. The mean values that ranged from 1.00 to 1.80 were interpreted as strongly disagreeing, 1.81 to 2.60 as disagreeing, 2.61 to 3.40 as neither agree nor disagree, 3.41 to 4.20 as agreeing, and 4.21 to 5.00 as strongly agreeing. Table 4.5 shows the outcomes.

**Table 1**
*Descriptive Analysis of Competitive Advantage*

| Statements on Competitive Advantage | Mean | SD |
|---|---|---|
| Over the last twelve months, the company has increased its internal rate of return (IRR) | 3.84 | .756 |
| Over the last twelve months, the company has increased its net present value (NPV) | 3.90 | .710 |
| Over the last twelve months, the company has paid out dividends | 3.92 | .720 |
| The company has witnessed sales growth over the last twelve months | 3.82 | .901 |
| The company has witnessed increased inventory purchases over the last twelve months | 3.70 | .868 |
| The company has a higher sales turnover ratio over the last twelve months | 3.71 | .856 |
| The company has witnessed increased revenue over the last twelve months | 3.95 | .823 |
| The company over the last twelve months has paid off debts | 4.07 | .759 |
| The company, over the last twelve months, has put aside cash for the future (saved money) | 4.10 | .800 |

Table 1 presents the research findings, which show that the study participants agreed with all the statements on competitive advantage, as evidenced by their means ranging between 3.70 and 4.10. The results indicated that the participants agreed their MSEs over the last twelve months had put aside cash for the future (saved money) (M = 4.10, SD = 0.800) and also agreed that the MSEs over the last twelve months had paid off debts (M = 4.07, SD = 0.759). Besides, respondents agreed that the companies had witnessed increased revenue over the last twelve months (M = 3.95, SD = 0.823) and agreed that the companies had paid out dividends (M = 3.92, SD = 0.720). Further, respondents agreed that over the last twelve months, the companies had increased their net present value (NPV) (M = 3.90, SD = 0.710) and also agreed that over the last twelve months, the companies had increased their internal rate of return (IRR) (M = 3.84, SD = 0.756). Other results presented in Table 4.5 show that respondents agreed with the provided statements. These descriptive findings show that according to the study participants, the MSEs had the competitive advantage on the three fronts of annual net income, annual sales turnover and annual return on investment.

### 4.2 Descriptive Statistics for Innovative Capabilities

The study sought to explore the prevalence of innovative capabilities in the MSEs in Juba, South Sudan. Study participants were provided with statements to assess their innovative capabilities. They were asked to specify whether or not they agreed with the statements regarding their MSEs. The partakers were instructed to categorise their agreement with the stated ideas on a five-point scale (1-5), signifying their level of agreement. The researcher employed mean and standard deviations to examine the responses. The mean values ranging from 1.00 to 1.80 were interpreted as strongly disagreeing, 1.81 to 2.60 as disagreeing, 2.61 to 3.40 as neither agreeing nor disagreeing, 3.4.1 to 4.20 as in agreement, and 4.21 to 5.00 as strongly agreeing. The results are presented in Table 2.

**Table 2**

*Descriptive Statistics for Innovative Capabilities*

| Statements on Innovative Capabilities | M | SD |
|---|---|---|
| Regular introduction of new products | 3.11 | 1.198 |
| Regular introduction of new services | 3.53 | 1.075 |
| Our products are differentiated from the competitors | 3.16 | 1.139 |
| Our services are differentiated from the competitors | 3.52 | 1.036 |
| Increased profitability due to product innovation in the last 12 months | 3.44 | 1.159 |
| Increased profitability due to service innovation in the last 12 months | 3.66 | 1.016 |
| There is continuous improvement in goods | 3.49 | 1.215 |
| There is continuous improvement in services | 3.80 | 1.047 |
| Regular introduction of new management practices | 3.60 | .948 |
| Increased profitability due to process innovation in the last 12 months | 3.45 | 1.051 |
| New products introduced annually | 3.07 | 1.144 |
| Goods are conceptualised and quickly taken to the market | 3.37 | 1.077 |
| Services are conceptualised and quickly taken to the market | 3.56 | 1.037 |
| There has been an increase in our market share in the last 12 months | 3.71 | .992 |
| The company brand is regularly evolving | 3.64 | .971 |
| The company's brand is recognised in the marketplace | 3.76 | .958 |
| Promotion (advertising, sales promotion, and sales force) strategies are innovative in a radical way | 3.61 | .931 |
| Distribution (channel, logistics, and supply chain) related strategies are innovative in a radical way | 3.67 | .851 |
| The company has a budget for research and development | 3.40 | 1.038 |
| The management regularly sources ideas from employees and customers | 3.99 | .727 |
| There is time and space to innovate | 3.88 | .781 |
| There is a diffusion of ideas within the company | 3.94 | .782 |
| There has been intellectual patent (IP) registration in the last 12 months | 3.57 | .842 |
| Employees submit ideas | 4.09 | .816 |
| Customers submit ideas | 3.95 | .928 |
| There are several active business projects in implementation in the last 12 months | 3.88 | .844 |

The study results provided in Table 2 show that the study participants agreed with most of the statements on innovative capabilities, as evidenced by their means, which ranged between 3.44 and 4.09. However, some statements that respondents were neutral ranged from 3.07 to 3.40. The study results show that the participants agreed that employees submit ideas (M = 4.09, SD = 0.816) and that management regularly sources ideas from employees and customers (M = 3.99, SD = 0.727). Besides, respondents agreed that customers submit ideas (M = 3.95, SD = 0.928) and that ideas are diffused within the companies (M = 3.94, SD = 0.782). These findings imply that for the statements that respondents agreed to, such innovative capabilities were prevalent in the MSEs in Juba. The research findings, however, showed that study participants were neutral to the statement that the companies have budgets for research and development (M = 3.40, SD = 1.038) and also neutral that goods are conceptualised and quickly taken to the market (M = 3.37, SD = 1.077). Additionally, respondents were neutral about whether their products were differentiated from the competitors (M = 3.16, SD = 1.139) and whether new products were introduced regularly (M = 3.11, SD = 1.198). These descriptive findings imply that in the opinion of the study participants, some MSEs had budgets for R&D, differentiated

products from competitors and regularly introduced new products, but a comparable number of SMEs did not have such innovative capabilities.

### 4.3 Inferential Statistics for Innovative Capabilities and Competitive Advantage

This section provides findings of the inferential statistical analysis appertaining to innovative capabilities and competitive advantage of MSEs in Juba, South Sudan. Inferential tests like correlation and OLS linear regression analyses were utilised for the statistical analysis.

#### 4.3.1 Correlation between Innovative Capabilities and Competitive Advantage

The study sought to determine the relationship between innovative capabilities and the competitive advantage of MSEs in Juba, South Sudan. The results of the Pearson correlation analysis test are presented in Table 3. The findings indicate a moderate and significant positive relationship between innovative capabilities and the competitive advantage of MSEs in Juba, South Sudan ($r = 0.588$, $p < 0.05$).

**Table 3**

*Correlation between Innovative Capabilities and Competitive Advantage*

| | | Competitive Advantage |
|---|---|---|
| Innovative Capabilities | Pearson Correlation | .588** |
| | Sig. (2-tailed) | .000 |
| | N | 244 |

**. At the 2-tailed 0.01 significance level, there is a correlation.

#### 4.3.2 Linear Regression Analysis for Innovative Capabilities and Competitive Advantage

The OLS linear regression procedure was utilised for predictive modelling. In this study, it was used to investigate the influence of innovative capabilities on the competitive advantage of MSEs in Juba, South Sudan. The study's first objective sought to determine the influence of innovative capabilities on competitive advantage in MSEs in Juba, South Sudan**.** Simple linear regression was fitted to answer this research question. The first null hypothesis of the study was tested using simple linear regression analysis findings.

$H_{01}$: Innovative capabilities have no significant influence on the competitive advantage of MSEs in Juba, South Sudan.

Before fitting the correlations and regression models,' preliminary tests were conducted to assess the regression assumptions. The tests undertaken included the linearity test between innovative capabilities and competitive advantage, the normality test of the data on innovative capabilities and the heteroscedasticity test of the regression residuals. The linearity test was the first trial conducted. The Analysis of Variance (ANOVA) test was utilised in the study to assess the linearity of the association between competitive advantage and innovative capabilities. The output indicated ($F = 136.120$, $p < 0.05$). The p-value for the Shapiro-Wilk test was 0.350, and the significance threshold of 0.05 was exceeded by the p-value, indicating a uniform distribution of the transformed information for innovation capabilities. The final diagnostic test was the heteroscedasticity test, which was analysed using the Breusch Pagan test. The results indicated no heteroscedasticity ($\chi 2 = 1.811$, $p = 0.251$), satisfying the homoscedasticity regression assumption. Thus, the OLS model regression model was appropriate for testing the influence of innovative capabilities on the competitive advantage of MSEs in Juba, South Sudan.

The regression model summary in Table 4a indicates R-squared relating to the relationship between innovative capabilities and explanatory power towards the competitive advantage of MSEs in Juba.

**Table 4a**

*Model Summary for the Innovative Capabilities on Competitive Advantage*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .588[a] | .346 | .343 | .45451 |

a. Predictors: (Constant), Innovative Capabilities

The findings in Table 4a indicated that the innovative capabilities of MSEs in Juba account for 34.6% of the variance in their competitive advantage (r-squared = 0.346). This finding proved that the residual term and factors not included in the model may account for 65.4% of the variance in the competitive advantage of MSEs in Juba. The researcher used the ANOVA test to assess the significance of the model. A brief overview of the outcomes is presented in Table 4b.

**Table 4b**

*ANOVA for Innovative Capabilities and Competitive Advantage*

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 25.752 | 1 | 25.752 | 128.119 | .000[b] |
| | Residual | 48.753 | 242 | .201 | | |
| | Total | 74.505 | 243 | | | |

a. Dependent Variable: Competitive Advantage
b. Predictors: (Constant), Innovative Capabilities

The results presented in Table 4b demonstrate that the f-value for the model was statistically significant, thereby indicating the significance of the model ($F = 128.119$, $p < 0.05$). The results indicated that the regression model fits the data well. The results further portray that innovative capabilities significantly influenced the competitive advantage of MSEs in Juba. The regression coefficients indicate that innovative capabilities influence the competitive advantage of MSEs in Juba. The coefficients were utilised to evaluate the influence's magnitude and direction. The research findings are presented in Table 4c.

**Table 4c**

*Regression Coefficients for Innovative Capabilities on Competitive Advantage*

| | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| **Model** | | **B** | **Std. Error** | **Beta** | **t** | **Sig.** |
| 1 | (Constant) | .941 | .266 | | 3.540 | .000 |
| | Innovative Capabilities | .817 | .073 | .588 | 11.165 | .000 |

a. Dependent Variable: Competitive advantage

The study's results presented in Table 4c resulted in the following statistical model.

$$\text{Competitive advantage} = 0.941 + 0.817\ (\text{Innovative Capabilities}) + \varepsilon$$

The findings presented in Table 4c indicated that if there were no innovative capabilities in the MSEs in Juba, the competitive advantage would have a rating of 0.941 (constant = 0.941). The findings also show that the competitive advantage of MSEs in Juba was positively and significantly influenced by their innovative capabilities ($\beta = 0.817$, $t = 11.165$, $p < 0.05$). Therefore, the null hypothesis that innovative capabilities do not significantly influence the competitive advantage of MSEs in Juba was rejected. The findings indicated that a unit change in innovative capabilities would yield a corresponding shift of 0.817 in the competitive

advantage of the MSEs. The findings suggested that altering innovative capabilities in MSEs will likely result in a corresponding shift in competitive advantage.

### 4.4 Quality Enhancing Capabilities and Competitive Advantage

The findings regarding the second study objective, which aimed to determine how quality-enhancing capabilities influence the competitive advantage of MSEs in Juba, South Sudan, are provided in this section. Two constructs, which were product Enhancing Capabilities and Service Enhancing Capabilities, were used to measure quality-enhancing capabilities. On the other hand, yearly net income, annual sales turnover, and annual return on investment were used to measure competitive advantage. Linear regression, descriptive analysis and correlation analysis were all included in the statistical analysis.

#### 4.4.1 Descriptive Statistics for Quality Enhancing Capabilities

The study explored the prevalence of quality-enhancing capabilities in The MSEs in Juba, South Sudan. A set of statements was provided to study participants to assess their quality-enhancing capabilities. They were asked to denote whether or not they agreed with the statements regarding their MSEs. The study participants were instructed to quantify their agreement with the stated assertions on a five-point scale (1-5), which was used to rank them. Means and standard deviations were used to examine the responses. The mean values that ranged from 1.00 to 1.80 were interpreted as strongly disagreeing, 1.81 to 2.60 as disagreeing, 2.61 to 3.40 as neither agree nor disagree, 3.41 to 4.20 as agreeing, and 4.21 to 5.00 as strongly agreeing. Table 5 shows the outcomes.

**Table 5**

*Descriptive Statistics for Quality Enhancing Capabilities*

| Statements on Quality Enhancing Capabilities | M | SD |
|---|---|---|
| The company uses high quality inputs | 3.54 | 1.090 |
| The company produces high quality outputs | 3.52 | 1.195 |
| The company has the technical capabilities to produce high quality goods | 3.39 | 1.204 |
| The company has design capabilities to produce high-quality goods | 3.41 | 1.246 |
| The company produces highly functional goods | 3.57 | 1.332 |
| The company produces highly durable goods | 3.60 | 1.353 |
| The company produces environmentally friendly goods | 3.62 | 1.323 |
| The company produces socially friendly goods | 3.78 | 1.232 |
| The company has the technical capabilities to provide high-quality services | 3.72 | 1.012 |
| The company has design capabilities to provide high quality services | 3.83 | .991 |
| The company provides highly functional services | 3.83 | 1.180 |
| The company provides high quality services | 3.94 | 1.116 |
| The company provides environmentally friendly services | 3.86 | 1.206 |
| The company provides socially friendly services | 3.96 | 1.116 |

The results in Table 5 show that the study participants agreed with all the statements on quality-enhancing capabilities except one, as evidenced by their means, which ranged between 3.41 and 3.96. The study results show that the participants agreed that the companies provide socially friendly services (M = 3.96, SD = 1.116) and that the companies provide high-quality services (M = 3.94, SD = 1.116). Besides, respondents agreed that the companies provide environmentally friendly services (M = 3.86, SD = 1.206) and agreed that the companies can provide high-quality services (M = 3.83, SD = 0.991). These descriptive findings imply that, in the opinion of the study participants, the MSEs in Juba had strong quality-enhancing

capabilities. Still, their technical capabilities to produce high-quality goods were moderate (M = 3.39, SD = 1.204).

### 4.4.2 Inferential Statistics for Quality Enhancing Capabilities and Competitive Advantage

This section provides findings of the inferential statistical analysis appertaining quality enhancing capabilities and competitive advantage of MSES in Juba, South Sudan. The statistical analysis comprised inferential tests, including correlation analysis and OLS linear regression analysis.

#### 4.4.2.1 Correlation between Quality Enhancing Capabilities and Competitive Advantage

The study sought to determine the relationship between quality-enhancing capabilities and the competitive advantage of MSEs in Juba, South Sudan. The findings of the Pearson correlation analysis test are presented in Table 6. The findings indicated a moderate and significant positive relationship between quality-enhancing capabilities and competitive advantage of MSEs in Juba, South Sudan ($r = 0.425$, $p < 0.05$).

**Table 6**

*Correlation between Quality Enhancing Capabilities and Competitive Advantage*

| | | Competitive Advantage |
|---|---|---|
| Quality Enhancing Capabilities | Pearson Correlation | .425** |
| | Sig. (2-tailed) | .000 |
| | N | 244 |

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

#### 4.4.2.2 Linear Regression Analysis for Quality Enhancing Capabilities and Competitive Advantage

Linear regression investigated the effect of quality-enhancing capabilities on the competitive advantage of MSEs in Juba. The study's second research question was to determine the influence of quality-enhancing capabilities on the competitive advantage of MSEs in Juba, South Sudan. The simple linear regression technique was used to analyse the results. Moreover, the simple linear regression analysis findings were applied to test the second null hypothesis of the study, which was;

$H0_2$: Quality-enhancing capabilities have no significant influence on the competitive advantage of MSEs in Juba, South Sudan.

However, prior to fitting the model, the study tested various regression assumptions. The tests undertaken included the linearity test between quality-enhancing capabilities and competitive advantage, the normality test of the quality-enhancing capabilities and the heteroscedasticity of the regression residuals. The ANOVA test of linearity showed that the significance value of the f test was less than 0.05 ($F = 54.371$, $p < 0.05$), confirming a linear relationship between quality-enhancing capabilities and competitive advantage. The Shapiro-Wilk test was 0.337; the p-value was above the significance threshold of 0.05, which indicates that the data for quality-enhancing capabilities was normally distributed. The heteroscedasticity test was the last diagnostic test, which was examined using the Breusch Pagan test; there was no evidence of heteroscedasticity ($\chi 2 = 1.925$, p 0.05); hence, the assumption of homoscedasticity in the regression model was met, making the linear regression model suitable for examining the effect of enhanced quality on the competitive advantage of MSEs in Juba.

The regression model summary in Table 7a includes the R-squared relating to the relationship and explanatory power of quality-enhancing capabilities towards the competitive advantage of MSEs in Juba.

**Table 7a**

*Model Summary for the Quality Enhancing Capabilities on Competitive Advantage*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .425[a] | .181 | .177 | .50817 |

a. Predictors: (Constant), Quality Enhancing Capabilities

The findings presented in Table 7a indicate that the quality-enhancing capabilities of MSEs in Juba account for 18.1% of the variance in their competitive advantage (r-squared = 0.181). This finding provides evidence that the residual term and factors not included in the model may account for 81.9% of the variance in the competitive advantage of MSEs in Juba. The researcher used the ANOVA test to assess the significance of the model. The outcomes are presented in Table 7b.

**Table 7b**

*ANOVA for Quality Enhancing Capabilities and Competitive Advantage*

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 13.489 | 1 | 13.489 | 52.316 | .000[b] |
| | Residual | 61.202 | 242 | .253 | | |
| | Total | 74.691 | 243 | | | |

a. Dependent Variable: Competitive Advantage

b. Predictors: (Constant), Quality Enhancing Capabilities

The results presented in Table 7b demonstrated that the f-value for the model was statistically significant, thereby indicating that the model ($F = 52.316$, $p < 0.05$) was significant; the results indicate that the regression model fits the data well. The results further portrayed that quality-enhancing capabilities significantly influenced the competitive advantage of MSEs in Juba.

The study produced regression coefficients to ascertain how quality-enhancing capabilities influenced the competitive advantage of MSEs in Juba. The magnitude and direction of the influence were evaluated using the coefficients. As a result, regression coefficients and t-tests were generated, and the research outcomes are presented in Table 7c.

**Table 7c**

*Regression Coefficients for Quality Enhancing Capabilities on Competitive Advantage*

| | | Unstandardised Coefficients | | Standardised Coefficients | | |
|---|---|---|---|---|---|---|
| **Model** | | **B** | **Std. Error** | **Beta** | **t** | **Sig.** |
| 1 | (Constant) | 2.678 | .171 | | 15.661 | .000 |
| | Quality Enhancing Capabilities | .329 | .046 | .425 | 7.227 | .000 |

a. Dependent Variable: Competitive advantage

The study findings in Table 7c lead to the following regression model:

$$\text{Competitive advantage} = 2.678 + 0.329\,(\text{Quality Enhancing Capabilities}) + \varepsilon$$

The findings presented in Table 4.21 indicated that quality-enhancing capabilities positively and significantly influence the competitive advantage of MSEs in Juba ($\beta = 0.329$, $t = 7.227$, $p < 0.05$). Therefore, the null hypothesis that quality-enhancing capabilities have no significant influence on the competitive advantage of MSEs in Juba, South Sudan, was rejected. The findings indicated that a unit change in quality-enhancing capabilities would yield a corresponding shift of 0.329 in competitive advantage. The findings suggested that altering quality-enhancing capabilities in MSEs will likely result in a corresponding shift in competitive

advantage.

### 4.5 Discussion of Results

The study findings indicated that innovative capabilities positively and significantly influenced the competitive advantage among MSEs in Juba, South Sudan. These findings aligned with the RBT by Wernerfelt (1984), which posits innovative capabilities as critical resources that enable a firm to gain a competitive advantage. The findings that innovative capabilities influenced competitive advantage also agreed with the findings by Nurjaya, Affandi, Erlangga, Sunarsi and Jasmani (2021) that product innovation and promotional activities positively affect the marketing performance of small and micro enterprises. The study findings concurred with Bigos and Wach (2021) that the effect of various types of innovations, such as process, product, marketing, and organisational innovation, can enhance the promotion of exports by SMEs in developing countries.

The study findings determined that innovative capabilities had a significant and positive relationship with the competitive advantage among MSEs in Juba. These findings support the findings by Sarkum and Syamsuri (2021) that possessing marketing innovation capabilities and a clear marketing strategy leads to a competitive advantage. Wang et al. (2020) had similar findings that one of the new marketing innovations firms are using is to target influencers with many followers on social media to sample their products and hope it goes viral and increases sales and profitability. Yeum, Wee, and Bang (2020) also found that marketing innovation involves internal marketing to employees that encompasses empowerment, communication, and compensation, contributing to a competitive advantage for the firm. Moreover, a firm can use marketing innovation to achieve a competitive advantage. However, this depends on the multiple interactions of relational resources available to the firm, such as channel equity, customer equity, intellectual resources, market intermediaries and customers.

A study by Wongsansukcharoen and Thaweepaiboonwong (2023) agreed that innovation capabilities among MSEs lead to a competitive advantage. The innovative capabilities included human resources practices like reward systems, employee involvement, career development and technological innovation. The ability of MSEs to have an innovation capability strategy was also crucial to attaining a competitive advantage (Farida & Setiawan, 2022). The researchers further elaborated that a firm's ability to innovate directly affects its operations and the quality of products and services. It is to be noted that some studies like Vrontis, El Chaarani, El Abiad, El Nemar and Yassine (2022) pointed out that innovative capabilities did not demonstrate a direct effect on the competitive advantage of a firm. Moreover, the study pointed out that there was no direct relationship between innovative capabilities and the financial performance of firms. However, Alkhatib and Valeri (2022) observed that MSEs could achieve a competitive advantage if they implemented radical innovations closely monitored by big data analytical systems.

The study determined that quality-enhancing capabilities significantly and positively affected the competitive advantage of MSEs in Juba, South Sudan. These findings support the Dynamic capability theory by Teece, Pisano and Shuen (1997), which is grounded on the ability to amalgamate internal organisational capabilities, such as quality-enhancing capabilities and external competencies, to take opportunities in a changing environment, avoid risk and gain a competitive advantage. The study findings are also in line with the findings by Bambang, Kusumawati, Nimran and Suharyono (2021) that quality-enhancing capabilities are dynamic capabilities that enable the firm to develop the capacity to address developing quality

challenges systematically, thus enabling the firm to provide better quality products in the market. These findings also concur with Bakator, Đorđević, Ćoćkalo, Nikolić, Stanisavljev and

Terek (2020) that the perceived quality of a good or service, credibility development, trust, and brand loyalty are crucial for achieving a competitive advantage.

Carter (2022) demonstrated that diversified quality-enhancing capabilities in the wine production business were crucial for obtaining a competitive advantage. Carter (2022) further expounded that enhancing quality can create and drive demand among MSEs. The ability of commercial banks in Jordan to enhance the quality of electronic services was demonstrated to increase competitiveness in the industry. Hence, firms that implement quality-enhancing capabilities can achieve a competitive advantage and improve organisational processes (Alrawabdeh, Alshurideh & Al Kurdi, 2022).

## 5.1 Conclusion and Recommendations

### Conclusions

The study findings determined that innovative capabilities significantly and positively affected the competitive advantage of MSEs in Juba, South Sudan. The study thus concluded that MSEs with innovative capabilities such as regular introduction of new products and services, differentiation of products from the competitors, continuous improvement in goods and services and regular introduction of new management practices are expected to attain a competitive advantage. Besides, the study concluded that MSEs attain a competitive advantage through the speedy conceptualization and marketing of products, regular evolution, engagement in research and development, and involvement of employees and customers in innovation. The study findings indicated that quality-enhancing capabilities have a positive and statistically significant effect on the competitive advantage of MSEs in Juba, South Sudan. These findings concluded that by adopting quality-enhancing capabilities such as using high-quality inputs, producing high-quality outputs, and developing technical capabilities to produce high-quality goods and services, MSEs can attain a competitive advantage. Additionally, the study concluded that design capabilities lead to the production of high-quality products and services, highly functional products, environmentally friendly products, and socially friendly products that could lead MSEs in Juba towards attaining a competitive advantage.

### Recommendations

The study found that innovative capabilities significantly positively influence the competitive advantage of MSEs in Juba, South Sudan. The study thus recommends that management in MSEs in Juba, South Sudan, ensure that they regularly introduce new products and services, offer differentiated products in the market and enhance the innovative capabilities of their MSEs by engaging in research and development. The management of the MSEs can enhance their innovative capabilities by developing and integrating a continuous improvement culture amongst their employees through training, mentoring, and coaching. The study also recommends that policymakers in South Sudan, such as the Ministry of Trade and Industry of South Sudan, finance and develop innovation hubs to assist MSEs in developing their innovative capabilities.

The study established that quality-enhancing capabilities significantly influenced the competitive advantage of MSEs in Juba, South Sudan. Therefore, the study recommends that management in MSEs in Juba ensure that their MSEs use high-quality inputs, produce high-quality outputs and develop technical capabilities to produce high-quality products. Moreover, the management of MSEs in Juba should ensure they produce highly functional, highly durable, environmentally friendly, and socially friendly goods. Management of MSEs in Juba should

also train a quality culture in their MSEs by relating quality and the basic values of the MSEs, having a formalized code of ethics and appropriate behavior for employees, establishing a transparent and inclusive atmosphere to facilitate the reporting of quality issues and ensuring that staff possess a comprehensive understanding of the genuine financial implications associated with the inability to institute and maintain a culture of quality inside the MSE. Additionally, the study recommends that policymakers in South Sudan, such as the Ministry of Trade and Industry, have mechanisms to support MSEs in enhancing quality standards.

### 5.2 Limitations and Suggestions for Further Research

The research targeted the MSEs in Juba, South Sudan, which limits the generalizability of its results to other MSEs in South Sudan. Moreover, the study variables were innovative capabilities and quality-enhancing capabilities, and thus, future studies should include other organizational capabilities variables not included in the study, such as seizing, reconfiguring, agility, and sensing capabilities. Finally, the research used a structured questionnaire to collect data. To get more in-depth information regarding the effect of innovative capabilities and quality-enhancing capabilities on competitive advantage among MSEs in Juba, South Sudan, a future study should consider applying other primary data collection instruments such as key informant interviews, unstructured questionnaires, open-ended surveys and focus group discussions.

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