P19 - RESEARCH

1.0 Introduction

E-procurement is the generic term applied to the use of integrated database systems and wide area (commonly web-based) network communication systems in part or all of the purchasing process (Croom & Brando-Jones, 2005). E-procurement allows buyers to automate transactions and focus on more strategic activities. E-procurement solutions also contribute to a better organizational performance, allowing reductions in cost and time when ordering from suppliers, and helping to achieve a well-integrated supply chain. Although there are many benefits in e-procurement solutions, there also appears to be some barriers to their successful implementation. Former research shows that many companies still prefer the traditional methods to communicate and exchange with business partners. Companies need to understand better how to implement e-procurement solutions on an efficient and effective manner. Any successful e-procurement system needs suppliers that are willing and able to trade electronically and their co-operation is crucial to the project's success. According to Harris and Dennis (2004), this degree of openness and transparency is new to most organizations, and it requires relevant cultural changes and high levels of trust between the participants.

The eruption of COVID- 19 pandemic created unprecedented circumstances and challenges in many dimensions, without clear and forecasted directions and guidance on the best strategies for coping with the emergency, including in the public procurement. As a result, especially in the first months of the pandemic in 2021, governments responded to the COVID-19 crisis in many ways.

E-procurement is seen as one of the measures of not only improving efficiency in businesses through reducing costs (Sonoiki & Sidi, 2020) but also of going about the COVID-19 management-related measures put in place by countries which affect businesses operations. E-procurement is associated with several advantages, which includes among others cost savings, reduction in human errors and importantly the reduction in time to conclude transactions due to minimized displacements of people as opposed to traditional procurement. Other advantages are the increase in transparency and accountability and thereby reducing corruption incidences (Harelimana, 2018; Ruzindana & Kalaskar, 2016). Despite these advantages, literature also argues that e- procurement is associated with a high investment of implementing tools compared to the desired outcomes (UN, 2006). Besides, since businesses are not uniform in terms of size, sector and capital investment, there are variations in how e-procurement affects the performance of businesses. It is also argued that, e-procurement is relatively new in Sub-Saharan Africa and most particularly in Tanzania (Harelimana, 2018) and hence its effect on businesses has not been widely researched upon especially during crises such as the COVID-19 pandemic. The COVID-19 pandemic has affected the profitability of businesses in Tanzania which are the drivers of the country's economy. The disruption in the global economy affected Tanzania through decreased supply and demand (Donthu & Anders, 2020). Sectors that were at high risk included trade, hospitality, airline industry, finance and education due to reduced supply of intermediate goods from China (UNDP Tanzania, 2020), among other reasons. According to the

1

December 2020 estimates, the country's Gross Domestic Product growth was revised down to 2.1% from the 6% forecast before the outbreak (Faria, 2021).

1.1   e-Procurement in Tanzania

With the advent of the Internet in Sub-Saharan Africa, e-procurement, a component of e-commerce, has gained popularity in both the public and commercial sectors. It's mostly being utilized to address the public sector's procurement concerns of lack of accountability and openness.

Tanzania, for example, implemented e-procurement systems to ensure that all public procurement activities, such as e-sharing, e-advertising, e-submission, e-evaluation, e-contacting, e-payment, e-communication, and e-checking and monitoring, are handled online (Leo Sun, 2009). Other benefits of e-procurement include better efficiency, lower transactional costs, decreased corruption, and improved management and monitoring of the procurement process. It is also claimed that it increases labour productivity (Murphy, 2000).

1.2   The Effect of COVID-19 on SMEs

Covid-19 has led to economic slowdowns in economies worldwide. The United Nations estimates that African economies have already lost about 29 billion the United States of America Dollars due to Covid-19. The United Nations Economic Commission for Africa estimates that the continent will lose 1.4% of its 2.1 trillion dollars' worth of Gross Domestic Product due to business disruptions resulting from movement restriction of workers, insufficient supplies, low demand, etc. The disruption in the global economy affected Tanzania through decreased supply and demand (Donthu & Anders, 2020). The sectors that were at high risk included trade, hospitality, airline industry, finance and education due to inter alia, reduced supply of intermediate goods from China (UNDP Tanzania, 2020). This led to the revision of the economic growth rate from 6% before the COVID-19 outbreak to 2.1% in 2020 (Faria, 2021). However, the COVID-19 impact on businesses is not uniform as Small and Medium Enterprises (SMEs) have been affected the most due to an increase in business' operating costs coupled with decreased sales and revenues (UNDP Tanzania, 2020; Donthu & Anders, 2020).

2.0 Objective of the Study

Although e-procurement is associated with the improvement of business profitability, there is little empirical evidence of this for SMEs – which form the backbone of the economy of a country.

Hence, the study is set to assess the effect of e-procurement on the profitability of Small and Medium Enterprises (SMEs) in one of the selected districts in Tanzania during the COVID-19 pandemic. Specifically, the study is guided by the following specific objectives:

Specific Objectives

(i)   To explore how the COVID-19 pandemic has affected SMEs the selected district,
(ii)   To examine factors for adoption of e-procurement by the SMEs in the

district,

(iii)   To identify the common forms of e-procurement that are used by SMEs in the selected district,

(iv)   To determine if e-procurement has led to improvement in the profitability of SMEs in the district during the COVID-19 pandemic.

3.0 Conceptual Framework

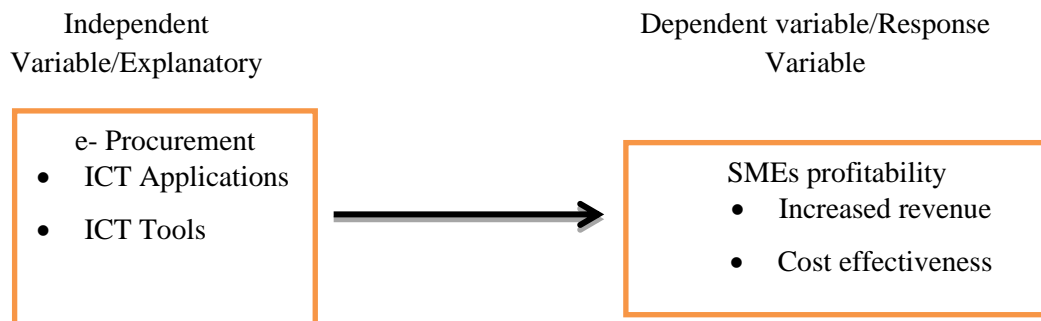In attempting to model the above problem, the following conceptual framework was sought:

Figure 1: Conceptual framework

In the above figure, it is postulated that SMEs profitability is mainly influenced by e-procurement through the use of ICT applications and tools. The indicators for e- procurement include the Information and Communication Technology (ICT) tools and applications while the indicators for SME profitability is cost-effectiveness and revenue. The intervening variable is the rate of adoption of ICT which in turn is influenced by several factors: the technical know-how to use the ICT, the affordability of the ICT, government policy towards ICT, etc.

4.0   Methodology

4.1 Research Design

Based on the research objectives outlined in section 2, this study adopted a descriptive research design using descriptive statistics to analyze data from the questionnaire that was administered to the respondents as well as the Key Informant Interviews (KII) and Focus Group Discussions (FGDs) that were conducted at the district. The descriptive design involved giving explanations/descriptions as well as obtaining descriptive statistics such as measures of central tendency, percentages and measures of variation.

4.2 Population of the Study

The populations of the study are all registered SMEs in the district in the city. The interviewees were: owners, co-owners or employees. Employees included accountants or finance officers or auditors working with the SME. The SMEs selected were from industries such as grocery, electronics, produce, stationery, hair salons and boutiques. Most of them were direct or indirect importers. Nonetheless, government representatives of the sectors in which these SMEs fall were also targeted as key informers due to their expertise in the topic.

4.3 Sampling Techniques

The study used non-probability sampling methods where respondents were selected based on non-random criteria. As such, respondents did not have equal chance of being included. The study used convenience sampling – including respondents who were most accessible – and purposive/ judgment sampling by interviewing respondents who were most knowledgeable for the research especially during key informant interviews and focus group discussions.

4.3.1 Convenience Sampling

In inconvenience sampling, potential respondents are selected based on their degree of accessibility. For example, eligible respondents who could easily be accessed by the research team were prioritized to the potential respondents who were not easy to access.

4.3.2 Purposive sampling

Purposive sampling is a technique where the sample is not randomly selected. Their selection is guided by the relevance that they have in achieving the study objectives. They are either experts in the field of study or they have significant insight to bring to the study. For example, government workers in the SME sector were purposefully selected because of their regulatory role of SMEs when makes them knowledgeable about the topic of study.

The reason for using non-probability sampling methods is that the researcher did not have the full list of SMEs to constitute the sample frame since most of them were operating informally. Secondly, the study aimed at developing an initial understanding of an under-researched population. Even then the researcher aimed at making the sample asrepresentative as possible.

4.3.3 Sample Size Determination

The researcher used Yamane's formula (1967) to try and generate a representative sample of SMEs. The sample size formula is denoted below.

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

Where;

n = required sample   N = population size
e = Margin of error (percentage in decimal form)

Assuming that the selected district has 500,000 SMEs which acted as the population, the study required a sample of at least 400 SMEs using the computation of a margin of error of 5% and a confidence interval of 95%. The computation also assumed that the population was normally distributed and the researcher expected a response rate of 100%. For enterprises that had more than one person, all the employees were interviewed if possible if they fell in the required categories (owners, co-owners, accountants and financial officers, procurement officers) to have a high response rate.

4.4 Data and Collection Methods

Both primary and secondary data were used. Secondary data were used for e- procurement-related theory and empirical studies reviewed in the literature. Primary quantitative data were collected using structured questionnaires while qualitative data were collected through Key Informant Interviews and Focus Group Discussions. Key Informant Interviews and Focus Group Discussions were conducted by using interview schedules.

4.5 Data Analysis

Quantitative data were analyzed through descriptive analysis to obtain measure of central tendency such as mean, and median. Frequency tables also were sought to present counts and percentages of occurrence of interested variables. Data were also presented in form of charts to serve readers with no taste of numbers. Qualitative data were transcribed using Microsoft word and computed using Nvivo software based on emerging themes. The unit of analysis were individuals who were either the owners or employees of the SMEs that had been selected for the study.