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Original Article

Absorptive Capacity of Micro, Small and Medium Enterprises in Accessing and Utilising Business Development Services in Arusha City and Moshi Municipality, Tanzania

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Micro, Small and Medium Enterprises (MSMEs) absorptive capacity to acquire and use Business Development Services (BDS) is critical for their survival, growth and ability to compete in the market. The objective of this paper was to examine MSMEs' absorptive capacity to access and use BDS in Moshi Municipality and Arusha City. A total of 254 MSMEs were sampled using random sampling for the study. A Cross-section design was used for this study. Respondents were sampled using simple random sampling. Data were collected using a structured questionnaire, focus group discussions, and observation. Content analysis was used to analyse qualitative data, and quantitative data were analysed using the Statistical Package for Social Sciences (SPSS). Results indicated that most MSMEs were aware of available Business Development Service Providers (BDSPs) and had used their services. The main sources of BDS for MSMEs were private business development providers. MSMEs have various potential in terms of human and financial capital to access and use the BDS provided by available BDS providers. Medium-sized enterprises showed high knowledge-sharing potential, mostly supported by high capacity of human and financial capital, while micro-enterprises had low potential for applying new knowledge, which was influenced by the low level of financial and human capital. The paper recommends that MSMEs should develop internal capacities through training and networking activities to acquire the capacity to identify new knowledge and productive BDS. The government should also provide subsidies to private service providers to invest and bring appropriate technology to MSMEs. Policies with minimum local content should be enacted to ensure that BDS providers provide services to micro and small enterprises. Furthermore, efforts should be made by BDS providers to effectively make use of media, formal and informal organisations, and the Ministry of Industry and Trade in raising awareness about BDS providers' functions and expertise in business development.

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INTRODUCTION

The ability to access and use Business Development Services (BDS) is critical for Micro, Small, and Medium Enterprises (MSMEs) to improve access to information and maximise growth. Some SMEs are being threatened by changes in customers' demands and expectations, market conditions, technological development, and globalisation (Bengesi, 2013; Khan & Khalique, 2014; Chatzoglou & Chatzoudes, 2018). Therefore, to respond to these challenges, MSMEs are required to strengthen their knowledge-based capital as the main asset for growth, which can be acquired through BDS (Bengesi & Roux, 2014; OECD, 2015). Scholars like Rugus, & Slavec (2017) argue that MSMEs need technology to improve the development of their products, processes, and services, knowledge that can be accessed by absorbing new skills and technology from external sources. Given that situation, MSMEs' ability to solve their challenges is embedded in their ability to access and use external knowledge to exploit opportunities in their surroundings (Valentim *et al.*, 2016). This external knowledge can be sourced from Business Development Services (BDS), which is an array of activities that MSMEs use to develop and enhance

their operations and improve their performance (Mcvay, 1999).

Thus, access and use of BDS is critical for MSMEs' development and growth (OECD, 2018). With this understanding, governments all over the world, including Tanzania, have put in place different mechanisms to enable MSMEs to access kinds of external support that are affordable, timely and adequate. Such kinds of support include policies in favour of MSMEs and BDS, information flow and access to finance and other kinds of support like networking, training, incubators and market, which are among BDS, which are essential for the growth of MSMEs (Kehinde & Ashamu, 2014; World Bank, 2023; UNCTAD, 2023).

In practice, BDS providers facilitate market access, provide infrastructure, introduce new technology, procurement services, improve management, technical skills, and advise on how to eliminate policy barriers, and help MSMEs develop their enterprises (Goodluck *et al.*, 2016; Sserunkuma & Nyeko, 2021). However, while it is convincing to believe that access to BDS and other external knowledge enables the development and growth of enterprises (Kahinde & Ashamu, 2014), how MSMEs manage BDS to create a competitive

advantage receives little attention (Denan, 2012), which brings this discussion to the concept of absorptive capacity.

It is against this background that this paper aims to examine the absorptive capacity of MSMEs to access and use BDS from providers to develop their enterprises in Moshi Municipality and Arusha City. This paper is guided by the following questions: Do MSMEs have the capacity to access and use BDS? Are MSMEs familiar with the available BDS providers? Which processes of knowledge acquisition, interpretation, sharing, and utilisation exist in MSMEs to influence their ability to develop new products?

Examining the absorptive capacity of MSMEs to access and use BDS is crucial because such capacity implies MSMEs' ability to innovate (Dutse, 2013; Zhixiong & Yuanjian, 2010). It is claimed that, in the real world, without a high level of absorptive capacity, firms cannot access and effectively use external knowledge (Roshartini *et al.*, 2011). That is why the research on which this paper is based was worth undertaking. However, different meaning is given to BDS; in the context of this paper the definition earlier postulated, is adopted for BDS to include non-financial services such as market access, infrastructure, policy advocacy, accounting/bookkeeping, consulting, input supply, training and technical assistance, technology and product development and business incubation (Parker, 2011; Van der Sluis, & Veldman, 2016). Exploring more about this domain would help MSME owners or managers to improve their firm's absorptive capacity effectiveness by facilitating the adaptation and development of innovation routines and capabilities.

However, existing literature still documents scant information about BDS sourcing in MSMEs and how BDS are transformed and combined with existing internal stocks of knowledge to modify or develop new organisational capacity and thereby influence MSMEs' performance. Thus, in order to bridge the existing knowledge gap in the subject

matter under investigation, it was crucial that this study be undertaken.

THEORETICAL REVIEW

Absorptive Capacity Theory (ACT)

This paper is guided by theoretical insight from Absorptive Capacity Theory (ACT). Absorptive Capacity has been described differently by different scholars. Cohel, & Levinthal (1990) described it as the ability of a firm to recognise the value of new external information, absorb it, and use it for commercial purposes. Zahra, & George (2002) conceptualised absorptive capacity and characterised it as a set of organisational routines and processes by which firms access, interpret, share, and exploit knowledge to produce a dynamic capability. Matusik, & Heeley (2005) and Limaj, & Bernroider (2017) argue that absorptive capacities are processes and routines developed by organisations to disseminate and share new knowledge.

Appropriate for this paper is the description given by Zahra, & George (2002), who described absorptive capacity as a set of organisational routines and processes by which firms access, interpret, share, and use knowledge for commercial purposes. These authors refer to this capacity as a deep-rooted capacity in the firms' routine and processes. This definition introduces four dimensions of absorptive capacity: (1) accessing, (2) assimilating/ interpreting, (3) transforming/ sharing (4) utilising new external knowledge to commercial ends. Referring to the description of absorptive capacity, it is considered that capacity and costs are involved in accessing, interpreting, sharing, and use to commercial ends this type of external knowledge.

In the context of this paper, a theoretical insight from absorptive capacity theory was used to establish the absorptive capacity process in MSMEs in accessing and using BDS from various providers. A theoretical insight was also used to examine the capacity of MSMEs' resources and absorptive

process within themselves. This paper, nonetheless, modifies the version of absorptive capacity as the practice by which MSMEs are capable of mastering the whole process of accessing relevant BDS from various BDS providers, interpreting acquired BDS, and applying it to solve their challenges. As discussed earlier in this paper, there have been a significant number of public and private support programmes established to develop MSMEs to become competitive in Tanzania. Therefore, MSMEs are required to have the ability to access and use such types of support in their day-to-day operations to improve the performance of their businesses.

Moreover, MSMEs are claimed to have limited resources, and this leads them to rely on BDS as the best alternative in enhancing their performance. MSMEs may access different BDS from various sources to accumulate knowledge. The challenges faced by MSMEs in the development of their enterprises include low engagement in the process of acquisition, interpretation, sharing and utilisation because of the costs and unknown performance opportunities that these accessed BDS could create. The capacity of MSMEs' resources in terms of human and financial capital is one of the main determinants of their capacity to combine acquired BDS with existing internal knowledge before it can be applied. Therefore, it is expected that internal resources existing in MSMEs will support them to recognise the value of BDS and transform it into something more meaningful, such as profit, rather than just accessing it, and hence develop and introduce new products, services, and processes in the market.

Knowledge Management (KM) Theory

The knowledge management view, which is a more recent perspective on organisational processes, takes into account an organisation's intangible resources. Highlighted are many scholars from different fields who contributed to the growth of the knowledge management view (Grant, 2002). Knowledge management is a group of processes

that create store, share, and use knowledge to achieve better performance (Zaim *et al.*, 2019). Likewise, KM is regarded as a set of procedures, infrastructures, technical and managerial tools designed for accessing, sharing, and implementation of information and knowledge from inside and outside firms (Torabia *et al.*, 2016). Therefore, knowledge management is a systematic or structured activity to improve a firm's ability to manage knowledge from within and outside the firm. The procedures include acquisition, transfer, and storage, retrieving knowledge to support knowledge creation as a basis for generating new products or services, thus supporting the achievement of firms' performance (Budihardjo, 2017). Knowledge is assumed to be useful in the sense that it increases a firm's performance from different sources, while absorptive capacity focuses on the ability to identify and utilise new knowledge.

The paper applied the KM as the key factor that supports MSMEs to establish relationships and interactions within and outside their organisations. KM draws MSMEs' resources together in the process of accessing, interpreting, sharing, and utilising of accessed BDS. KM facilitates the quick transfer and distribution of BDS among MSMEs employees and those who need it. Therefore, the ability to use BDS requires resources and KM that support MSMEs to put acquired BDS into new goods, services, and processes. While this view has been used to illustrate the role of knowledge sharing in value creation, less attention has been paid to describing the process by which knowledge sharing can positively affect the organisational output.

The System Theory

Systems theory was first proposed by Von Bertalanffy Ludwig in the year 1968 in an attempt to understand complex systems and how best they can be managed. The system theory of the organisation views an organisation as a result of the interaction and composition of dependent and related elements (Von, 1956). The elements could be accessed internally or externally. An

organisation must interact with its external surroundings to access various inputs in terms of resources or knowledge for its development and growth. Since the surroundings are dynamic and constantly changing, it causes uncertainty about what organisations must do to survive. Therefore, knowledge is regarded as one of the most important inputs for dealing with uncertainty and the survival of organisations.

In this regard, MSMEs are seen as a system built by various resources from within and from their surroundings. Like any other system, they are faced with uncertainties and challenges. Therefore, they need various resources and information to combat them. Knowledge management is a key factor used to identify the types of resources and information an organisation needs to reactivate the system. Similarly, knowledge management, through technology, procedures, and managerial tools, influences the capacity of organisations to use accessed resources or information for their performance.

However, in this theory, the functional paradigm view is dominant; it does not consider the ability of resources and how knowledge is applied to enhance the firm's performance.

This paper assumes that SMEs can access and process knowledge and yield better performance compared to their competitors. In this view, these theories are useful in understanding the process of absorptive capacity in the studied MSMEs.

The Concept and Processes of Absorptive Capacity

The process of absorptive capacity is built upon the contribution of Zahra, & George (2002), who refer to absorptive capacity as a sequence of events grouped into four dimensions: acquisition, assimilation, transformation, and application. Activities involved in these processes are coordinated by MSME employees (Kang & Lee, 2017). According to Sun, & Anderson (2010), the first process of absorptive capacity is accession of

resources and or BDS, which is referred to as the ability to evaluate and collect information from external sources. Knowledge can be accessed through communication with external stakeholders, including customers, suppliers, competitors, consultants, or through BDS providers (Si Xue, 2017). Other sources include meetings, discussions, and group work (Torabia *et al.*, 2016). Knowledge accession and creation require a group of people who come up with new ideas, new concepts, innovative products or processes (Pandey, 2014). Therefore, this is regarded as the ability of an organisation to access new knowledge and solutions related to their activities, managerial procedures, products/services and technology (Tubigi *et al.*, 2013). Knowledge acquisition is regarded as an influential process in an organisation's ability to develop new products (Tubigi *et al.*, 2013; Kimaiyo *et al.*, 2015; Alaarj *et al.*, 2016).

The acquired knowledge is taken to the second stage, where it is interpreted. The interpretation process begins at the individual level, then extends to the group level, and finally reaches the entire level of the firm. This process takes the knowledge acquired to the third step for sharing and assimilation. At this stage, the acquired knowledge is shared and combined with MSMEs' existing knowledge, including documentation, storage, and retrieval of knowledge in certain knowledge depositories of an enterprise (Abubakar *et al.*, 2017). The process of sharing knowledge includes interaction and exchange of experiences, ideas, and skills through departmental meetings, group discussions, mail exchange, telecommunication, documents, and informal dialogues to combine existing and acquired knowledge to create new knowledge (Alaarj *et al.*, 2016). Knowledge sharing activities are supported by employees' skills, expertise, or information based on experience (Islam *et al.*, 2017).

Nevertheless, the last process is the application of new knowledge, which refers to the ability of the firm to convert acquired knowledge into its

activities, which largely depends on employees' skills, expertise, and availability of necessary resources, including financial resources and KM, to improve the performance of an organisation. This ability develops the processes of institutionalisation, allowing the firm to capture new knowledge in its routines, systems, procedures, and surroundings for the improvement of organisational performance (Alaarj *et al.*, 2016).

Several qualitative studies have been conducted to determine the absorptive capacity process (Zahra & George, 2002; Easterby-Smith *et al.*, 2008). These studies provided richer examples of the processes and practices adopted in absorptive capacity in specific empirical contexts. However, less has been documented so far on how BDS is transformed through these processes in MSMEs. Thus, there was a need for an empirical study to explore how these processes take place within MSMEs by drawing empirical evidence from Arusha City and Moshi Municipality. Undertaking the study on which this paper is based was motivated by the need to understand if different dimensions of absorptive capacity exist and how they take place in the studied MSMEs. These processes will reveal the ability of MSMEs to actively utilise BDS. Therefore, for the study, it was found appropriate to use these dimensions to assess the absorptive capacity process within MSMEs in the study area and come up with the findings to bridge the gap in information.

Determinants of Absorptive Capacity

Researchers have made several attempts to venture into the area of MSMEs' absorptive capacity determinants. For example, it was found that MSMEs' internal factors, such as owners' education and prior work experience, were important factors in accessing external knowledge for innovation in their enterprises (Romijn & Albaladego, 2002). Kamasak (2020) found that financial capital and technology influenced absorptive capacity on the innovation performance of MSMEs. Darnall *et al.* (2010) established that employee qualifications,

such as education and training programmes, are the main determinants. Hofmann *et al.* (2012) established other determinants such as prior work experience and technical skills of the workforce, while Romijn, & Albaladego (2002) identified the size of firms measured by start-up capital as an indicator of the absorption capacity. Loewe *et al.* (2013) argue that the size of the firm affects its ability to access external support for innovation; the smaller the firm size, the lower the ability to acquire knowledge from the external environment. Other researchers have claimed that the size and sector of activity are also important for MSMEs' absorption capacity (Jordan & O'leary, 2008; Weterings & Boschma, 2009).

Generally, MSMEs' internal capacities facilitate the acquisition, assimilation, and application of BDS. However, a review of the literature on absorption capacity has shown that there is no universally accepted application and measurement of absorption capacity because organisations differ in size and functions (Whittington, 2006; Ojo *et al.*, 2014). Furthermore, application and operational engagement of the concept of absorptive capacity in different fields and various levels of analysis has led to confusion in its measurement, determinants, and its effects on various factors, which are assumed to determine the capacity of MSMEs to acquire resources. Nevertheless, most of the MSMEs' capacities in the context of BDS acquisition and application have not been explored in the study area.

EMPIRICAL REVIEW

Absorptive capacity is one of the factors of knowledge management and a pillar of MSMEs' learning and knowledge transfer (Kamseh & Jolly, 2008; Kang & Lee, 2017). Knowledge creation in MSMEs depends to a great extent on their absorptive capacity, which is understood as 'one of a firm's fundamental learning processes with the ability to identify, assimilate and exploit knowledge from the environment' (Lane *et al.*, 2006; Zaim *et al.*, 2019). According to Torabia *et al.* (2016), knowledge management is managing knowledge

through organisational technology, procedures and systematic processes to organise, stabilise, implement, and share explicit and implicit knowledge from employees, to improve organisational performance.

Moreover, absorptive capacity is regarded as an ability of an organisation to acquire and utilise knowledge to contribute to organisational performance in the form of innovation, new product development, and competitiveness (Yongliang, 2010). This is because achieving superior performance depends on the ability of MSMEs to accumulate knowledge and use it to resolve their challenges (Alaarj *et al.*, 2016). This paper study focuses on four processes of MSMEs' absorptive capacity, which are very important because the findings can help enterprises to further explore their impacts on their ability to introduce new products.

Several empirical studies have made some efforts to examine the firms' absorptive capacity in external knowledge sourcing. For example, Zaim *et al.* (2019) examined the effect of absorptive capacity and KM processes and their influence on the capabilities of employees within organisations. The findings indicated that effective absorptive capacity and KM processes positively contribute to improving human capital. Liu *et al.* (2017) in their study on innovation performance in Chinese manufacturing industries found that absorptive capacity was positively related to industries' innovation performance. Likewise, Tseng *et al.* (2011) examined whether absorptive capacity increased the innovation performance of the Taiwanese design industry, and they found that absorptive capacity is positively related to innovation performance. Zhixiong, & Yuanjian (2010) found that knowledge is a key factor to maintain continuous innovation of enterprises in China. They identified the absorptive capacity as a set of skills and knowledge with which a company has to absorb, transform, and use. Their study concluded that communication and mutual understanding were crucial factors for absorptive

capacity. Colombo *et al.* (2013) and Okamuro *et al.* (2011) examined the determinants of networking as a mode of external knowledge sourcing for start-up firms. Likewise, Lin *et al.* (2002), in their studies on Chinese enterprises, studied important factors for absorptive capacity and found convincing associations between absorptive capacity and factors such as diffusion channels for external technology, organisational interaction mechanisms and Research and Development (R and D) and resources. They concluded that firms cannot successfully integrate and apply external knowledge unless they possess a high level of absorptive capacity and KM. Bala Subrahmanya (2001), in his study, found that the lack of prior educational background of entrepreneurs differentiated the level of innovation of small enterprises in the engineering industry. Consequently, employees who possessed a university degree represented a higher level of absorptive capacity in MSMEs (Muscio, 2007). Thus, the ability of a company to use the knowledge that exists outside it depends on the knowledge that the organisation has in its interior (Anatoliivna, 2013), and this is based on the assumption that a firm's internal capacity is associated with its absorptive capacity.

In the context of this study, the effective absorptive capacity of MSMEs is paramount that firms engage the services of highly educated employees and at the same time invest continuously in their resources to be in a better position to acquire and utilise BDS. Although previous studies recognised capacities encompassed within MSMEs, the capacity of their employees to access and use BDS and the process of absorptive capacity within their firms remain unexplored. Therefore, this paper explores whether MSMEs can access and use BDS and whether the absorptive capacity dimensions process exists in the studied MSMEs.

To determine the capacity of MSMEs to access and use BDS in the studied MSMEs, this paper used the criteria described by different studies based on reviewed studies: human capital and MSMEs' size.

These factors influence MSMEs in deciding whether to acquire BDS, and if yes, what kinds of BDS are appropriate to seek. Human capital refers to the level of education and experience acquired in a given field of knowledge over time. It is widely accepted that the highly educated and technically qualified staff is more receptive to assimilating and transforming available external knowledge. In other words, companies whose employees are highly educated and trained will have higher levels of absorptive capacity, whereas MSMEs size is determined by the number of employees and capital (Nonaka & Takeuchi, 1995; Ravichandran & Lertwongsatien, 2005; Moreira and Markus, 2013).

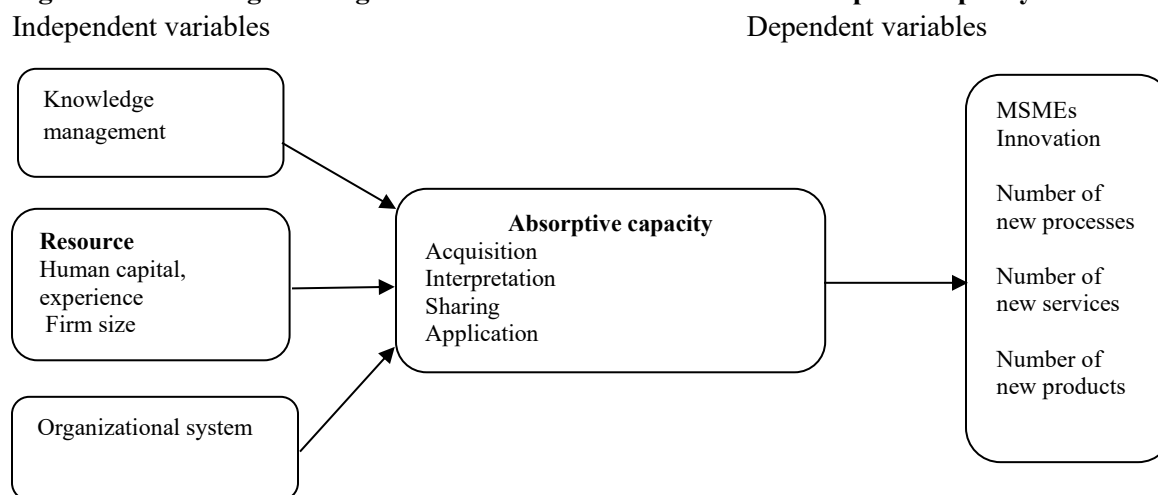
The Conceptual Framework for this Paper

Figure 1 presents the conceptual framework of this paper and suggests that the most important driving forces for the competitive success of MSMEs is the ability to innovate, which is the result of the application of accessible BDS. Innovation can be defined as an outcome of the creation of goods or services that are new to the market (World Bank, 2006). This paper modified the definition as an outcome of the process of BDS absorption to create new services, goods and processes. In this respect, absorptive capacity, which is referred to as the

firm's competence in using knowledge acquired from outside, is influenced by the organisational system, which supports organisational interaction with its environment. The system makes internal knowledge available to the employees and provides information for organisational learning. The absorptive capacity of MSMEs depends on relationships and structures which allow access to and dissemination of relevant knowledge and play a decisive role in their capacity to exploit opportunities.

Likewise, KM influences each of the four abilities of absorptive capacity. At first, KM provides means to identify relevant resources by facilitating the identification and acquisition of relevant knowledge. Second, KM supports the assimilation of knowledge by building and organising a firm's knowledge stock, and finally, it encourages the transformation of knowledge, comprising the combination of prior and newly acquired and assimilated knowledge, by providing means to update and share knowledge. The result of the processes of absorptive capacity, system, and knowledge management is increased SMEs' absorptive capacity to create new products, services and processes.

Figure 1: Knowledge Management Contribution in MSMEs' Absorptive Capacity



Source: Adapted and modified from Zahra and George (2002) and Von Bertalanffy (1956).

METHODOLOGY

Study Area

This study was conducted in Arusha City and Moshi Municipality. The two study areas were selected because they are among the urban centres with a considerably high number of MSMEs in northern Tanzania (URT, 2016). The two research sites connect tourism and regional transit for the Northern Corridor of Tanzania. Similarly, the cities are homes to a large manufacturing sector in the region, such as coffee, breweries, soft drinks, dairy, food and sugar processing, agro-forest processing factories and large pharmaceutical industries (Pasape, 2018). These potentials call for demand for services provided by MSMEs, such as raw materials and other inputs needed for production, manufacturing, and service provision. The economic growth and concentration of MSMEs in these districts, on the other hand, has resulted in the demand and concentration of BDS providers, which support the development of MSMEs in these areas.

Research Design, Sampling Procedures and Sample Size

The study adopted qualitative and quantitative research approaches with a cross-sectional research design that allows data collection at a single point in time (Babbie, 1990). The research design was used because it is suitable for descriptive analysis. The population for the study was MSMEs in Arusha City

and Moshi Municipality. The sampling frame for the study was a list of MSME practitioners in Arusha City and Moshi Municipality. A total of 254 MSMEs were randomly selected from the available list of 696 MSMEs from which the sample was drawn. Similarly, a simple random sampling strategy was used to obtain 48 Focus Group Discussion (FGD) participants from 254 participants for both locations (two FGDs for each type of enterprises: micro, small and medium. The sample size of 254 participants is much larger than the minimum 30 sample size recommended by Bailey (1994). The formula for sample size calculation proposed by Yamane (1973) was used, at the 95% confidence level and 0.05 sampling error as presented in equation (1).

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

Where:

n = sample size

N = population size and

e = level of precision (sampling error)

$$n = \frac{696}{1 + 696(0.05)^2} = 254$$

Measurement of Key Variables

The study measured various variables for MSMEs' capacity as indicated in Table 1.

Table 1: Micro, Small and Medium Enterprises Capacity

Indicators	Measurement	References
Human capital	• Formal education	Lall (1992), Cohen & Levinthal (1990), Chaminade & Vang (2008). Grekova <i>et al.</i> , 2016; Jansen <i>et al.</i> , 2005
Experience	• (Number of years worked)	
Firm size	• Number of employees	Loewe <i>et al.</i> (2013), Weterings & Boschma (2009), Jordan & O'leary (2008) and Cohen & Klepper (1996)
	• Capital	

Source: *Researcher's own construct*

Data Collection

A questionnaire was used to capture the characteristics and capacity of MSMEs, awareness

of BDS providers and access to BDS. Qualitative data were collected through FGD using a checklist

on issues related to BDS absorption processes in MSMEs.

Data Analysis

Thematic content analysis (L'Écuyer, 1987) was used to analyse qualitative data obtained from focus group discussions. In this regard, many words of text transcribed from recorded information were compressed into fewer content categories, resulting in synthesised meanings based on the study objective, the knowledge absorption process in firms. The information obtained from the MSMEs survey was analysed using the Statistical Package for Social Science (SPSS) software, for descriptive statistics including frequencies and percentages.

RESULTS AND DISCUSSION

This paper assessed the absorptive capacity of MSMEs to access and use BDS. Specifically, the paper assessed the capacity of MSMEs to acquire and utilise BDS; MSME practitioners' awareness of available BDSs; and the processes of knowledge management, knowledge acquisition, assimilation, transformation, and application to SMEs.

Capacity of SMEs to Acquire and Utilise BDS

In the context of this paper, three main factors were applied to assess MSMEs' absorptive capacity to access and use BDS, namely employees' education level, experience and firm size. In essence, absorptive capacity in MSMEs depends on the level

of education of employees as well as their size in terms of capital and the number of employees (Volberda *et al.*, 2010; Schweisfurth & Hertatt, 2018).

Formal education offers essential skills for individuals to master their businesses, increase confidence and enhance absorption capacity to acquire and utilise BDS. The findings, as presented in Table 2, illustrate that the greatest proportion (32.3%) of MSME employees had a secondary education and above. This means that employees could identify and apply relevant BDS for their enterprises. The level of education increases awareness and exposure to various existing BDS providers and services in their areas. The acquired level of education increases the ability to decide or advise management to consider a broader variety of new alternatives or to alter established firms' processes to accommodate acquired BDS. Likewise, educated and technically qualified employees are more receptive to interpreting and sharing available BDS (Kang & Lee, 2017). According to Schweisfurth, & Hertatt (2015), employees must have background training and experience to deal with communication challenges which separate their firms from interacting with external sources of knowledge. In this view, employees with high knowledge will have the ability to absorb knowledge from their surroundings (Helfat & Peteraf, 2015).

Table 2: Micro, Small and Medium Enterprises Capacity

Level of education	Frequency	Per cent
Primary	36	14.2
Secondary	82	32.3
Certificate	17	6.7
Diploma	56	22.0
First Degree	57	22.4
Master's Degree	6	2.4
Total	254	100.0

Source: *Researcher's construct*

Given the fact that most entrepreneurs in the study area had basic education, as shown in Table 2, it is apparent that, due to the overall qualifications that

the MSMEs had, they had adequate capacity to access and use BDS. In essence, the level of education attained enhances the employees'

confidence in identifying appropriate BDS to meet the needs of their enterprises. Similarly, basic education improves the overall quality of the owner/manager's basic literacy, which increases the chances of obtaining information (Regner & Zander, 2014). The study findings of this paper are in line with the suggestion by Kang, & Lee (2017) that managers should have sufficient education to coordinate actions related to the mechanism to transfer technology to ensure sufficient absorptive capacity.

Moreover, by observing the size of MSMEs, this paper establishes that financial capital, about the size of MSMEs, is one of the crucial elements to undertake innovations in MSMEs, which is accelerated by the acquisition of BDS. Inadequate

financial capital limits MSMEs' access to and utilisation of acquired technology, hire and employ skilled personnel. This hinders the potential to adequately meet the needs of consumers (Loewe *et al.*, 2013).

As presented in Table 3, MSMEs were classified into three categories based on the MSMEs Policy of 2012 (URT, 2012). MSMEs with less than 5 employees and less than 5 million capital were categorised as micro-enterprises. Those with 6 to 49 employees and a capital between TZS 5.1 and 200 million were small enterprises, and those with above 50 employees but below 99, and a capital of between 200 and 800 million were medium enterprises.

Table 3: Micro, Small and Medium Enterprises Size

Category	No of Employees	Capital (million)	Frequency	Per cent
Micro enterprise	<5	< 5	146	57.5
Small enterprise	6 to 49	5.1 to 200	62	24.4
Medium enterprise	50 to 99	201 to 800	46	18.1
Total			254	100.0

Source: *Researcher's construct*

The majority of the surveyed MSMEs (57.5%) were microenterprises with a small capital of less than five million Tanzanian shillings. Small capital depicts low investment and, therefore, low ability to access and apply BDS for innovation; though in other cases, the presence of more microenterprises creates an environment that enhances MSMEs' absorptive capacity. This is based on the fact that micro and small enterprises are more adaptive and flexible to change their resource base to adopt new ones (Ritam & Kalyan, 2014). The findings from this study are in line with the MSMEs Policy of 2003 (URT, 2012), which says that, in Tanzania, the micro-enterprises category covers a large proportion of enterprises.

Given the fact that the majority of MSMEs are microenterprises with a low capital of less than five million, it might negatively affect their capacity to

access and utilise high-cost BDS. These observations are supported by findings by Lindvert (2018) and Isaga (2019), who reported that the unavailability of finance for investment negatively impacts the ability and performance of MSMEs. Financial limitation for growing and expanding enterprises is a concern for MSMEs in many developing countries. Most of the MSMEs rely on internal finance, which is often inadequate for MSMEs to engage in sourcing external support (Sharmilee & Sitharam, 2016). Even though micro enterprises cannot afford high-cost BDS, they can access BDS through sponsored training, incubators, and networking that allow sharing of resources and information (Cheng *et al.*, 2014).

Furthermore, the study also established how long the respondents had been managing their businesses. Experience supports them to know what

BDS is required in different situations and different settings, and where to seek BDS. This paper considered all kinds of experience regarding business as suggested in the literature. Literature has categorised these experiences in three groups: general experience, such as education, industry

experience, and entrepreneurship experience, which refer to experience in activities related to business ownership. All these types of experience are linked with employees' experience (Ng & Hamilton, 2015).

Table 4: Experience in Managing Business

Experience	Frequency	Per cent
1 to 3 years	104	40.9
4-6 years	74	29.1
7-9 years	43	17
Above 10	33	13
Total	254	100

Source: *Researcher's own construct*

As presented in Table 4, the greatest proportion (40.9%) of the respondents had more than three years of experience. Samei, & Feyzbakhsh (2015), in their study on business competence, argue that experience gives owners high chances of being more innovative in their businesses. Three years' experience is long enough for someone to generate the capability to identify relevant BDS for the needs of their enterprises.

These findings imply that the majority of the employees have worked long enough to be able to identify, access, and evaluate external sources of BDS. Experience facilitates the identification of appropriate external information and its absorption in the improvement of MSMEs' performance. Findings from this study are supported by Ndemezo, & Kayitana (2018), who argue that internal organisational capability, including experience of owners, increases the capacity to effectively use outside knowledge. In addition, employees' experience provides MSMEs with a means to reduce overall transaction costs to acquire new knowledge and integrate this knowledge into existing systems (Greko *et al.*, 2016; Darnall & Edwards, 2006). For example, previous experience with a certain programme allows MSMEs to timely adopt new knowledge, as previous knowledge exists.

Awareness of Available Business Development Service Providers

Despite MSMEs' absorptive capacity as presented above, awareness about existing BDS providers is critical for access and potential use of BDS. However, assessment of MSMEs' awareness of available BDS providers, in essence, depends on their level of exposure to the external environment. An individual with a tendency to interact with the environment will influence the possibility of identifying new knowledge, such as BDS (Kuratko & Morris, 2018). External information awareness refers to the extent to which organisations track best performers, main competitors, and technologies in the industries, and maintain contact with suppliers, customers, and the government to gather information from the external environment (Limaj & Bernroider, 2017). This suggests that an active organisation system is required for MSMEs to access and use new knowledge.

The findings presented in Table 5 show that most of the MSMEs (82.3%) were aware and had used BDS, while 17.7 % were familiar but had not used the services. The familiarity with available BDS might be attributed to exposure gained through attendance at training and advertisements made by BDS providers, which were linked to MSMEs' prior education.

Table 5: Awareness of Available Business Development Services Providers

Familiarity with BDS	Moshi municipality (n=115)	Arusha City (n=139)	Total
Familiar with BDSPs and used their services	93(80.9%)	116(83.5%)	209(82.3%)
Familiar with BDSPs but did not use their services	22 (19.1%)	23 (16.5%)	45(17.7%)
Total	115(45.3%)	139 (54.7%)	254(100.0%)

Source: Researcher's construct

Findings on the use of BDS by 82.3% is higher than the findings by North *et al.* (2011), who argued that the proportion of MSMEs using BDS is below 40%. Small firms in developing countries may not use BDS due to several reasons, one being low awareness of available BDS benefits for the growth of their enterprises (Kabanda & Brown, 2017).

Furthermore, as argued by FGD discussants, the main limitations of not accessing and using BDS include the high costs attached to consultation fees. In some cases, MSME owners in micro businesses such as saloons, butchery, and mini shops felt that their businesses were small and did not need BDS. In other cases, respondents were of the view that BDS providers were not beneficial to their businesses. It was also learnt that long bureaucratic processes, especially in financial institutions such as banks and Savings and Credit (Cooperative Society SACCOS), were a hindrance to some MSMEs to access BDS. One of the FGD discussants commented as follows:

"Sometimes it takes me more than an hour to be served in SACCOs and banks, yet we are required to fill a lot of papers and follow a lot of procedures." (FDG participants, February 2017).

The above statement indicates that, although MSME owners and managers are aware of available external services, many factors are impeding them from accessing and using BDS. Results from this study are consistent with Magembe (2017) and Haron *et al.* (2013), who argue that MSMEs do not use external support because of high costs associated with the services, the time spent on

getting support, poor experience, and poor relationships with the support providers. Moreover, it was learnt that some MSMEs could not differentiate between non-financial and financial services, and they focused on support purely on financial aspects, as agreed by FGD participants that:

"We do not need finance for our businesses because we had enough savings before we started our businesses" (FGD respondent, January 2017).

Therefore, these findings indicate that MSMEs lack a lot of information on multiple services provided by BDS providers. Some MSMEs were constrained by their perceptions towards BDS and uncertainty about the returns of these services to their businesses. Findings from this study are similar to those by Juma, & Said (2019), who found that inadequate experience and knowledge of support services can lead MSMEs to a suboptimal choice of providers or reluctance to use the services. Similarly, lack of knowledge among MSMEs about the benefits of external services and criteria for choosing BDS providers leads them to choose irrelevant BDS (URT, 2012; Sospeter, 2016).

The Process of Absorptive Capacity

This section aimed to determine how absorption of BDS takes place in MSMEs through dimensions of absorptive capacity, such as acquisition, assimilation, transformation and application of BDS from the MSME practitioners' perspective. The level of absorptive capacity is determined by the extent to which MSMEs can translate relevant BDS

into their own enterprises. MSMEs have to be able to make connections between their technologies or internal information and what others know and are doing while embracing the MSMEs' routines and processes that allow them to analyse, process, and hence utilise acquired BDS (Moreira & Markus, 2013; Lis & Sudolska, 2020). The four processes/phases are described in the following subsection based on the empirical findings from the field.

Knowledge about the Acquisition Process

Small and Medium Enterprises access knowledge from different external sources, bring them into their firms, and assess them to decide whether to absorb them or not. The ability to acquire BDS is facilitated by employees' level of education, skills and experience. Most of the visited MSMEs could identify sources of BDS and acquire them from these sources (Table 6).

Furthermore, a few MSMEs, for example, 39.8%, accessed BDS from public sources. In some cases, private providers were contracted by public agencies to provide specific services to MSMEs. The findings from this study are in line with Bonger, & Chileshe (2013) and Braidford, & Stone (2016), who found that, despite the efforts made by the government to provide incentives to public BDS providers, their access to MSMEs remains low due to several factors. These include uncoordinated supply of information and lack of information on BDS for some MSMEs, and even absence for others. It is worth noting that insufficient support

and less accessibility of public BDS are not without consequences for the development and performance of MSMEs. This is because government support plays a significant role in the MSMEs' development (Szczygielski *et al.*, 2017). However, for government support to effectively enhance MSMEs development, there should be a coordination centre for performance improvement and access to services (Mole *et al.*, 2014). There should also be efforts to increase the number of public BDS and, where possible to extend their services within MSMEs reach.

Furthermore, results from this study revealed that most micro enterprises (46.5%) access public BDS from Tanzania Revenue Authority (TRA), Tanzania Bureau of Standards (TBS), Small Industries Development Organization (SIDO), and 35% only access BDS from private BDS providers, mainly from Microfinance Institutions and SACCOS. The capacity of micro enterprises to access BDS from private BDS providers might be due to low financial capacity to afford service costs (Table 6). Most micro enterprises do not access BDS due to a lack of information on their benefits or high financial costs of service (Stone, 2012; Isaga, 2019). Therefore, a market-based system can impact the ability of micro enterprises to access and use BDS, leading to slow or underdevelopment among SMEs. In this view, it is important for the government to put more effort into the supply of various public BDS to ensure MSMEs have access to affordable services.

Table 6: Access to BDS by Micro, Small and Medium Enterprises

Enterprises size	Public		Private		Do not use BDS		Total N
	n	%	n	%	n	%	
Micro	68	46.5	51	35.0	27	18.5	146
Small	21	34.8	28	45.0	13	21.0	62
Medium	12	26.0	29	63.0	5	11.0	46
Total	101	39.8	108	42.5	45	17.7	254

Source: Researcher's construct

In addition, it was learnt that besides BDS providers, MSMEs gain access to information from

other sources, such as browsing the internet, reading newspapers, participating in trade fairs organised by

government agencies, as participants in an FGD agreed as follows:

“Sometimes, some of us have the opportunity to participate in exhibitions and trade fairs such as Nanenane and Sabasaba. By participating in such events, we promote our products and services and meet potential customers and learn from other participants” (FGD, Moshi Municipality, January 2017).

The above quote suggests that MSME practitioners are appreciative of the support they receive from external service providers. Moreover, it was learned that the nature of the company influenced the acquisition of knowledge, as some enterprises, such as garage owners, have limited employees who have access to external knowledge. This was illustrated by motor vehicle mechanics as follows:

“We initiated to have internet access, but management considered it a waste of time and resources” (FGD participant, Moshi Municipality, February 2017).

Issues like these discourage employees from valuing and looking for new knowledge, which results in rare and low self-driven knowledge searching. Comparison was made to determine the capacity of micro, small, and medium enterprises to access BDS. The findings indicate that most medium enterprises, 63%, accessed BDS from private service providers. This capacity was attributed to the availability of finance and a high proportion of qualified personnel who were receptive to new ideas and had more exposure to the external environment compared to micro and small enterprises. Medium enterprises had a structured and coordinated structure to accessing, sharing, and using external knowledge through clear rules and processes. For example, it was observed that medium enterprises like hotels and manufacturing enterprises had long-term and short-term plans and budgets for their staff development activities. Some had contracts with consulting professionals like lawyers and auditors who were consulted when a

need arose. The capacity of medium enterprises was influenced by financial capacity and the experiences of their staff in running a business. Most of the micro and small enterprises appeared to be uncoordinated and struggling to access BDS, some of them depending on district councils to link them with BDS providers.

BDS Sharing Process

Knowledge sharing is the ability to disseminate new knowledge gained from outside and assimilate it individually. This is done by sharing it with other members of the organisation to brainstorm and reach a common understanding (Cohen, 1998). In addition, knowledge sharing promotes internal knowledge circulation among employees, and this can also increase knowledge resources (Radaelli *et al.*, 2014). However, BDS knowledge transformation and sharing was often presented as a collective process and a team-based activity, involving the generation of common knowledge and understanding of new concepts and processes acquired. This implies the need to articulate and codify new ideas about products and processes and the capacity to see their application on a wider basis. Formal education and experience play a key role here, mainly, the ability to interact with different units and staff members in sharing acquired BDS and relating it to customers' needs.

From these study findings, medium enterprises such as hotels and a few industries were observed to have organization structures that were supportive of information sharing. Acquired BDS were shared through meetings, emails, memos, and telephone calls. They also had arrangements for special discussion meetings when a need arose. However, most often, these meetings included only top management team members, leaving a bulk of employees out of the loop. On the other hand, other enterprise structures prompt the organisation to meet weekly to discuss events, ideas, and concerns. It was observed that, in some instances, the interpretation of knowledge from such meetings

was not well communicated, which sometimes led to fuzziness and confusion among team members.

The BDS knowledge sharing process was influenced by human capital, which increased the ability to communicate and motivate employees to absorb it. According to Zahra, & George (2002), firms differ in their capacity for value creation due to their different knowledge transformation and exploitation skills. However, it was learned that in micro enterprises there was low social interaction because employees were few employees and no central system that could support BDS sharing. For example, most microenterprises were managed by one or two people, limiting the formal structure of the organisation for information sharing. Consequently, the organisation's knowledge management system is owned individually, which makes the process of creating new processes and abilities relatively problematic. With these kinds of enterprises, individual experience is rarely shared and, therefore, low added value from their knowledge initiatives. In comparison with small enterprises, there was a good information-sharing system through direct contact among employees in different sections.

Generally, in the surveyed micro and small enterprises, compared with medium enterprises, there were no formal systems that would allow comprehensive information sharing for both acquired and existing knowledge within MSMEs. The enterprise system was mostly determined by the nature of business, which also affected the capability of MSMEs to create a common knowledge base and system that could facilitate organisational forecasting and improved performance.

Knowledge Application Process

Knowledge application refers to MSMEs' ability to use the BDS acquired in their activities (Zahra & George, 2002). The ability to apply BDS develops the processes of institutionalisation, which allows the application of acquired BDS in processes,

products or services of the enterprise. The BDS application process depends on internal resources such as human capital, finance and the knowledge management system of the organisation.

During interviews, FGD participants were asked to explain how BDS was utilised in their companies. FGD participants had BDS in various ways with varying outcomes. In practice, there had been an increase in the production of crops such as vegetables and watermelons as a result of the external BDS application. For example, one spice-selling respondent revealed that there had been an increase in monthly sales from 15 kg to 50 kg, and this was after attending SIDO training. A veterinary store owner also revealed that he had managed to diversify his business, such as selling dog breeds and dog food, following knowledge application from training offered by BDS providers.

Another participant revealed that he had been introduced to modern poultry cages that helped him reduce infection incidents among poultry and thus significantly reduce production costs. Some other participants had studied modern farming methods, as presented in the statement below:

"Here, we learnt fertilisation at various stages of plant growth, which improved the quality of our yield" (FGD participant, Arusha City, January 2017).

Participant in another FGD agreed as follows:

"We used to pack bread in simple packaging materials without printing, but after learning about packaging, we changed the packaging materials by giving packaging materials attractive colours. Since then, the demand for our products has increased" (FGD, Arusha City, January 2017).

The above focus group participants' views indicate that MSMEs were able to utilise external knowledge in the development of various products, which led to positive results in terms of the products and services they provided.

Therefore, MSMEs can utilise the acquired knowledge as results and be able to produce goods and services that meet customers' requirements since they are involved in determining the quality of the product/service they want. The ability to apply new knowledge stimulates MSME innovation ability (Crossan *et al.*, 1999; Sun & Anderson, 2010). Similarly, customer engagement increases the ability of SMEs to meet consumer needs (Ebersberger *et al.*, 2012; Wikhamn *et al.*, 2016).

CONCLUSIONS, RECOMMENDATIONS AND THEORETICAL IMPLICATIONS

Conclusions

The findings from this study have shared insights into MSMEs' accessibility and utilisation of BDS. Specifically, this study has highlighted the interplay of absorptive capacity, KM, and system theories. The findings of this research indicate that the processes of BDS acquisition, transformation, and application involve the whole firm system with close interactions of human, financial capital, and the KM process to access and utilise BDS. Absorptive capacity is facilitated by the coordination and integration of the firm's internal resources that are embedded in the routines of the enterprise, both internally and externally, and in how it engages with BDS providers. However, differences in their capacity and knowledge management affect the absorption processes for the BDS acquired. Medium-sized enterprises showed a high knowledge-sharing potential, which was supported by high capacity of human capital, financial capital and organisational structure that supports knowledge management. Likewise, micro-enterprises had low potential for applying new knowledge derived from BDS, which was influenced by low capacity in financial and human capital. Effective and successful access and use of BDS requires the capacity of SMEs, as well as internal resources, since they both affect the extent to which new BDS can be accessed and utilised by MSMEs. Moreover, some MSMEs not only acquire knowledge, but also machines, technologies, tools

and information. Thus, without a sufficient level of internal expertise and resources, the absorption capacity of MSMEs can be very limited, resulting in low impacts on MSMEs' productivity and growth.

Recommendations

The paper recommends that micro and small enterprises develop internal capacities through training and exposure meetings to acquire the capacity to identify new knowledge and productive BDS. Likewise, they should strengthen the operation and structure of their enterprises to enhance effective relationships with the external environment.

The government should provide subsidies for private service providers who can invest and provide appropriate technology to MSMEs. Subsidies should be attractive enough to compensate for the costs that may be incurred. In addition, policies such as minimum local content policies should be applied to motivate BDS providers to render services to SMEs, particularly micro and small enterprises.

Furthermore, BDS providers should make effective use of formal and informal organisations as well as public actors such as ministries in raising awareness of BDS providers' functions and expertise in business development. This is because information provided by public entities is perceived to be credible to service users. Media can be highly useful in sharing user experiences of specific services and service providers. Public actors such as the Ministry of Industry and Trade might outline ways to support MSMEs in raising the level of awareness of the significance of BDS providers amongst less experienced enterprises and develop channels through which MSMEs can make their needs known to BDS providers.

In addition, to create a competitive advantage, MSMEs need to enhance the adoption of knowledge management practices and technology to strengthen their absorptive capacity at the individual and firm levels.

This paper also recommends that MSMEs develop a keen interest and awareness towards services provided by BDS providers and also use external as well as internal ideas, especially those from key customers, suppliers, competitors, research organisations and the market, to accelerate innovation and develop their enterprises.

This suggests that policy-makers need to reconsider the role of knowledge management practices regarding the development of absorptive capacity in MSMEs for the identification and exploitation of business opportunities in changing economies.

Theoretical Implications

The paper employed three theories, which are the Absorptive Capacity Theory (ACT), the Knowledge Management (KM) and the System Theory (ST). These theories were employed in objectives one and three to examine the capacity of MSMEs to absorb, utilise BDS and the process of BDS absorption in MSMEs. The ACT examines the capacity of MSMEs and the resources they need to absorb BDS. Its dimensions were also used to examine the process of BDS absorption in MSMEs. The other theories, KM and ST, are based on the principles of managing resources and the flow of knowledge within MSMEs.

KM asserts that, in order to achieve organisational competitive advantage, the organisation should strive to invest in knowledge management practices because it is a crucial element for organisational learning. The study applied the theory in determining whether there is any learning pertaining to BDS absorption processes in the studied MSMEs. It is considered that for BDS absorption to occur, there should be concerted efforts to manage knowledge.

Based on the ST grounds, the formal structure of MSMEs supported employees to access and utilise BDS. The study suggests that the existence of MSME structures is crucial in supporting the BDS absorption process within MSMEs. It was evident that medium enterprises had an established

structure, which influenced high absorption of BDS compared with other enterprises (micro and small). Therefore, this study suggests that the effective absorptive capacity process in MSMEs is influenced by KM and the system.

Research Limitations and Areas for Further Research

The research has its limitations and needs further investigation into the field of absorptive capacity and knowledge management in MSMEs. First, the topic of the research still experiences a lack of empirical studies from Tanzania, which is an obvious gap in the current literature of this study. The role of absorptive capacity and technology in knowledge management in MSMEs has not been well-researched. Therefore, future researchers should consider venturing into this area.

Second, this study did not measure absorptive capacity on the performance of MSMEs directly, as it was assumed that effective absorptive capacity would necessarily result in MSME performance. However, the correlation between the absorptive capacity and KM application and their impact on MSMEs must be considered as an important area for future research.

Third, it is unfortunate that there is no universally accepted application and measurement of absorption capacity. Furthermore, application and working usage of the concept of absorptive capacity in different fields and various levels of analysis have led to confusion in its measurements, determinants, and effects on various factors, which are assumed to determine the capacity of MSMEs to acquire resources. Measurement and operation of absorptive capacity have to be considered in future research.

Finally, the respondents represented various MSMEs and industries in the study area, but were restricted to the Northern Zone of Tanzania, raising the problem of generalisation. The findings from the sampled MSMEs might not apply to other firms. Therefore, a larger and more heterogeneous set of

organisations in other zones should be analysed to replicate the findings of this study.

Despite these limitations, the insights from this study will inspire other researchers and scholars to use the findings as a basis for future studies.

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