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CONTEXTUALIST INQUIRY INTO E-COMMERCE INSTITUTIONALIZATION IN DEVELOPING COUNTRIES: THE CASE OF MOZAMBICAN WOMEN-LED SMMEs

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ABSTRACT

Aim/Purpose	This study explores how women-led SMMEs in developing countries, specifically in the Mozambican context, institutionalise e-commerce by focusing on the ongoing interaction between the SMME, its context, and process of e-commerce institutionalization.
Background	It is believed that institutionalization of e-commerce provides significant benefits of unlimited access to new markets, and access to new, improved, inexpensive and convenient operational methods of transacting. Although prior studies have examined the adoption of e-commerce and the enabling and constraining factors, few have examined e-commerce (i) institutionalization (that is, post-adoption), and (ii) from a gender perspective. This study aims to respond to this paucity in the literature by exploring how women-led SMMEs in developing countries, specifically in the Mozambican context, institutionalise e-commerce.
Methodology	The study follows a qualitative inquiry approach for both data collection and analysis. Semi-structured interviews were adopted for data collection and thematic analysis implemented on the data. SMMEs were purposively sampled to allow for the selection of information-rich SMMEs for study and specifically those that have gone through the experience of adoption and in some cases have institutionalized e-commerce.

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Contribution	The empirical findings explain how the institutionalization process from interactive e-commerce to transactive e-commerce unfolds in the Mozambican context.
Findings	Transition from interactive to transactive e-commerce is firstly influenced by (i) the type of business the SMME is engaged in; and (ii) customer and trading partner's readiness for e-commerce. Secondly, the transition process is influenced by the internal factors of (i) manager's demographic factors; (ii) mimetic behaviour arising from exposure to (foreign) organizations in the same industry that have mature forms of e-commerce; (iii) the business networks developed with some of these organizations that have mature forms of e-commerce; (iv) access to financial resources; and (v) social media technologies. Thirdly, the process is influenced by external contextual factors of (i) limited government intervention towards e-commerce endeavors; (ii) limited to lack of financial institutions readiness for e-commerce; (iii) lack of local available IT expertise; (iv) consumer's low purchasing power due to economic recessions; (vi) international competitive pressure; and (vii) sociocultural practices.
Recommendations for Practitioners	The study provides SMME managers, practitioners, and other stakeholders concerned with women's development with a better understanding of the process in order to develop appropriate policies and interventions that are suitable for the reality of women-led SMMEs in Mozambique and other developing countries with similar contextual characteristics.
Recommendation for Researchers	The study contributes to the existing debate of e-commerce and the use of ICT for development in developing countries by providing a distinct contribution of the institutionalization process and how the contextual structures influence this process.
Impact on Society	Women-led SMME managers can learn from the different experiences, and compare their e-commerce efforts with SMMEs that were able to institutionalize and make strategies for improvements within their organizations.
Future Research	The manner in which women-led SMMEs employ e-commerce requires further investigation to understand how issues related to gender, the cultural context, and different regions or countries impact this process.
Keywords	small micro and medium enterprises (SMMEs), contextualist inquiry, e-commerce, developing countries

INTRODUCTION

Gender and technology have traditionally been seen as an important area of study by most scholars because although technology appears to have become intertwined in our lives, a "gender gap in technology adoption remains" (Theis, Lefore, Meinzen-Dick, & Bryan, 2018, p. 671). This gender gap shows that men are more likely to access and use ICT than women (Kim, Lee, Christensen, & Merighi, 2016), especially in developing countries where contextual structures influence women's ability to access technology (Hilbert, 2013). Even in contexts where technology is prevalent, Agarwal and Malhotra (2016, p. 295) show that access to ICT, its use, and even employability is restricted to a select group of women who come from an urban background with high socioeconomic status. Despite these challenges, there are women embarking on entrepreneurial activities running in the form of Small Micro and Medium Enterprises (SMMEs), and they employ ICTs to support their economic, political, and social activities.

Whilst there is no scarcity of literature on SMMEs adoption and use of technology in developing countries, there are fewer studies that examine women-led SMMEs and even fewer that provide a contextual account of what informs women-led SMMEs to institutionalise technology in their organisations. This study focuses on e-commerce – a technology that is seen as having the potential to facilitate the integration of developing countries into the global economy. The benefits of e-commerce are well documented in the literature (Freedman, 2016). Given the increase in “the number of entrepreneurs using e-commerce to start their own online business” (Qasim, Mohammed, & Liñán, 2018), and the need to capitalise on the benefits offered by e-commerce, it is imperative we explore the experiences of women-led SMMEs and how they institutionalise e-commerce in their daily practices.

In the context of e-commerce, institutionalization is a maturity stage of sophistication indicative of having a fully interactive, transactive, or integrated e-commerce capability (Molla & Licker, 2005). An SMME is said to have an interactive status when it has a web presence with capabilities to accept queries from customers either via e-mail or any other platform. A transactive status entails an online presence with the capability of selling and purchasing products and services, while an integrated status implies that SMMEs have a web presence integrated with suppliers, customers and other back-office systems (Molla & Licker, 2005). In developing countries, specifically in Africa, few SMMEs have attained any of these maturity stages of sophistication. Despite this fact, there are limited studies that have examined what makes some SMMEs achieve such maturity and others not, given that they all face the same contextual structural constraints or opportunities. Suominen (2018) examined the role of women-led firms and regulatory challenges in e-commerce trade in developing countries in Southeast Asia and Africa. Whilst their findings extend the discussion of women-led SMMEs and the e-commerce debate, the findings are not context-specific, an important aspect given that each community has specific social interactions that constitute its contextual discourse. Ngoasong (2017) emphasises the importance of context and shows how context as an antecedent to entrepreneurial digital competencies influences digital entrepreneurship in a resource-scarce environment. Previous studies have also highlighted the need to explain the contexts and processes associated with entrepreneurial behavior (Ucbasaran, Westhead, & Wright, 2001) so as to better understand the “role of context in motivating people to engage in entrepreneurship and endure the challenges associated with its various activities” (Zahra, Wright, & Abdelgawad, 2014).

On this note, the purpose of this study is to explore how women-led SMMEs in developing countries institutionalise e-commerce. The geographical context of the study is Mozambique, a least developed country (LDC) situated in Southern Africa. In the context of this study, an SMME is defined as per the criteria of the Ministry of Trade and Industry (MTI) of Mozambique, which takes into account the number of employees (between 1 and 99) and annual turnover (at 29 million Mozambican Meticaís). An SMME in this context is defined as an enterprise having between 1 and 99 employees and record an annual turnover of less than 29 million Mozambican Meticaís. A contextualist analysis approach is adopted to focus on the ongoing interaction between the SMME, its context, and the process of e-commerce institutionalization. Such an inquiry allows researchers to understand how transformation efforts unfold in the Mozambican SMMEs context. The rest of the paper is structured as follows: Section 2 presents related work on e-commerce, Section 3 illustrates the methods employed to carry out the study, Section 4 presents the findings and discussion thereof, and Section 5 concludes the study.

THEORETICAL BACKGROUND OF THE STUDY

A contextualist inquiry approach allows researchers to examine organisational change, specifically to examine change as a process in a historical and contextual way by simultaneously analysing the environment within which the change occurs and the successive interconnection of events that lead the change to occur (Pettigrew, 1985). Several researchers have adopted a contextualist inquiry style to examine organisational changes. Syed and Mathiassen (2014) examined how release management can be organised and improved in recurrent development of software development and Ijab (2015)

sought to understand why organisations create and/or apply green information system innovation, how the innovation process takes place, and what are the outcomes from the green information system innovation. Mindel and Mathiassen (2015) draw on the contextualist framework to explore the administrative potential of health information technologies. Shemi and Procter (2018) use the contextualist analytical approach as a lens to understand the e-commerce entrepreneurship process. These studies show how a contextualist inquiry approach “stresses the importance of gaining an overall understanding” of a phenomenon “through explanations of contextual differences and their reasons” (Sheehan, Fenwick, & Dowling, 2010, p. 1818).

Contextualism identifies three areas of concern: *content*, *context*, and *process*. Content describes the area undergoing change or transformation. The organisation itself can be undergoing changes and understanding the factors that influence this change from within is important for decision-makers. The changes within the organisation could, for example, encompass a new technology, a new product being launched, or even a department within the organisation. In the context of this study, *content* is the institutionalization of e-commerce; that is, the move or the transformation from one maturity stage of e-commerce (say interactive) to the next (transactive). Since e-commerce is a phenomenon that takes different forms depending on the context, a delineation that accommodates the reality of an LDC such as Mozambique is imperative.

Context in the contextualism framework describes the factors that may be significant to the *change and the actions and interactions of the various parties (process)* as they go through the change (the process – “the how of change”) (Pye & Pettigrew, 2005; Toraskar & Lee, 2006). Change processes can only be identified and studied against a background of the context (Pettigrew, 1985), “the antecedent conditions of change, the internal structure, cultural, and political context within which” e-commerce institutionalization “occurs, as well as broad features of the outer context of the firm from which much of the legitimacy for change is derived” (Pettigrew, 1987, p. 650). The change processes that unfold in an organisation are shaped by the internal and external context and understanding the sequence, flow of events, and patterns that lead to the outcome (institutionalization) is a core requirement of the processual research (Pettigrew, 1990). In the context of this study, there have been highlights from previous scholars on how the context in developing countries can be examined to understand how this context influences e-commerce institutionalization. Molla and Licker (2005) identified internal factors which influence e-commerce adoption and institutionalization in developing countries. These factors include the perception of e-commerce elements in the organisation, availability of resources, management commitment, and the strategic and operational model that small businesses use to govern their business operations. Tang Sai and Standing (2015) posit that top management commitment, availability of resources, and internal governance influence how far and how fast organisations move up the e-commerce ladder to a more sophisticated level.

External factors perceived to influence e-commerce adoption and institutionalization in developing countries are: (i) government’s readiness to promote and support e-commerce; (ii) readiness of other members of the business ecosystem such as consumers, suppliers, and competitors, to adopt e-commerce; (iii) socio-cultural norms (iv) and the existence, development and cost of support-giving industries such as telecommunications, finance, and IT as factors that affect e-commerce initiatives in developing countries (Molla & Licker 2005; Kabanda & Brown 2017). The role played by the environmental influences becomes more important for women-led business in Mozambique, as they are embedded in a cultural system that is predominantly patriarchal (Macueve, Mandlate, Ginger, Gaster, & Macome, 2009), where cultural norms and values have influenced the supporting institutions and shaped women’s perceptions (Quagraine & Ariwa, 2016). These factors and the resultant networks are an important aspect of the context and process of entrepreneurship for SMMEs as they “provide a context for entrepreneurs (and their firms) to enlarge their knowledge of opportunities, to gain access to critical resources and to deal with business obstacles” (Ucbasaran et al., 2001).

METHODOLOGY

This study adopts a contextualist inquiry as a theoretical framework which assumes that social processes are embedded in the contexts that shape and are shaped by them; therefore, they cannot be studied outside this context (Tsohou, Karyda, Kokolakis, & Kiountouzis, 2015, p. 42). With this understanding, an interpretivist paradigm was adopted for the study to allow the researchers to become cognisant of the contextual nuances. SMMEs were purposively sampled to allow for the selection of information-rich SMMEs for study, especially those that have gone through the experience of adoption and in some cases have institutionalized e-commerce. All selected SMMEs were from Maputo, the capital city of Mozambique, which has the highest urban population and concentration of SMMEs in the country. Maputo also functions as the central hub of the Mozambican economy with most of the ICT services and providers located there. Initially, sixteen SMMEs were contacted. Five of the contacted SMMEs did not respond, and of those that did respond four were not suitable – two of them were not owned by Mozambicans and the other two had less than one year of establishment. This resulted in seven suitable SMMEs that agreed to participate in the research. One of them was omitted from further analysis due to providing incomplete information. Whilst the final sample size is small, it should be borne in mind that in “qualitative research, the determination of sample size is contextual and partially dependent upon the scientific paradigm under which investigation is taking place” (Boddy, 2016). This study follows qualitative research which is oriented towards interpretivism, and therefore does not require larger samples, but rather in-depth qualitative interviews with knowledgeable individuals who would have passed through some form of e-commerce adoption so as to allow for “a representative picture of the whole population under review” (Boddy, 2016). It is not unusual for qualitative studies “to use a small sample of participants since qualitative research concentrates on the quality of the information collated” (Quick & Hall 2015).

Interviews, which were informed by the contextualist themes of *Content*, *Context*, and *Process*, were used to collect information specific to e-commerce institutionalization with the remaining SMMEs. Questions around e-commerce institutionalization and the organisations’ characteristics formed part of the Content as they represent aspects that need change. Internal and external factors were used to seek information regarding the Context. The various actions, reactions, and interactions (Weaver, Ellen, & Mathiassen, 2015) during the maturity progressions from one stage to the other will be noted as part of the Process element. Prior to the start of the study, the interview guide was piloted on three Portuguese SMEs. All the interviews were conducted in Portuguese, the official language of Mozambique. The actual data collection for the study was conducted in Maputo, where the SMEs were located in the districts of KaMpfumo, kaMxaquene, and Kamubukwana.

Data analysis then commenced immediately, following Cope’s (2005) four distinct levels of analysis. Firstly, the data were transcribed and then translated into English by the second author who is fluent in both languages – English and Portuguese. In the second and third levels of analysis, a thematic analysis approach was used with the purpose of identifying and analysing patterns (themes) within data. NVivo software was used to aid this process. In addition to identifying the themes, the second level of analysis involved a rich description for each case. The case study narratives were structured according to the contextualist elements of *Content*, *Context*, and *Process*. The third level of analysis involved a thematic cross-case analysis on what is common among and what is particular to each the cases. This process not only aggregated shared experiences from across the cases but also included unique experiences that were particular to some cases.

FINDINGS AND DISCUSSION

CONTENT

The *content* represents the areas of transformation under investigation (Pettigrew 1987), and in this study, is the institutionalization process of e-commerce; that is, the gradual progression, including

activities, from one maturity state of e-commerce to a more mature state. Six SMMEs participated in the study as shown in Table 1. All SMMEs had moved from initial adoption to either interactive (SME_D, and SME_E) or transactive (SME_A, B, C, and F) maturity stage. This transition was enabled by various technologies; specifically websites, email and social media such as Twitter for communication, marketing and advertising both locally and internationally (SME_F, SME_D). They also had the frequent practice of using mobile phones for communication, specifically with local customers prior to *finalising any transaction* (SME_B). These technologies, specifically social media, allowed organisations to interact with their customers and share their *experiences* and *passion* (SME_B) and, in so doing, have a greater chance of building solid relationships (Alalwan, Rana, Dwivedi, & Algharabat, 2017).

Table 1: Demographic details of SMMEs

SME characteristics					SMME owner characteristics		
Maturity stage	SMME	Sector	Year established	N° of employees	Educa-tion	Age	Marital
Interactive	SME_D	Consulting	2010	60	Phd	45	Married
	SME_E	Catering	1996	62	High school	50	Widow
Transactive	SME_A	ICT	2010	17	BSc IT	29	Married
	SME_B	Hair & Beauty	2014	3	Msc Telecom	35	Single
	SME_C	Retail	2014	12	Bsc	31	Married
	SME_F	Fashion	2011	19	Bsc	23	Single

Interactive maturity stage

Two SMMEs were at the interactive stage of e-commerce: SME_D and E. The owner/manager of the SME_D had lived in Portugal for more than 15 years and returned to Mozambique to work in a Portuguese company. Then, she started her own IT consulting company while doing her PhD. Currently she manages a team of 60 employees, providing advisory and technical assistance services to government, development agencies, civil society organizations as well as the private sector. All the ICT related services including maintenance of the company website are outsourced to a local ICT firm.

The owner/manager of the SME_E has more than 20 years of experience in business management. Her organization specializes in catering services for individual, small-medium sized corporations, development agencies and government institutions. The company has currently expanded its services to include decoration and restaurant services. They have a website for advertising and marketing purposes and accepts queries from potential customers. These queries are then followed up by the organization via mobile phones or emails. Immediate family members of the owner are part of the managerial team. These two SMMEs perceived it unnecessary to transcend to a more mature form of e-commerce because of their clientele needs. Most of their customers were non-governmental organizations (NGOs) and government entities that tend to be late adopters of technology. In these two SMMEs, the education background (SME_D) and the vast business experience (SME_E) are factors that influenced transition to interactive maturity because *I became more aware of the need to listen to my clients, so we had to go interactive* (SME_E), but the nature of their business as service providers *and our clients who mostly have not adopted e-commerce themselves, made us not see transactive maturity e-commerce as significant to our business* (SME_E).

Transactive maturity stage

The owner/manager of SME_A completed her computer science degree in Germany and, whilst doing so, participated in an internship program. This exposed her to various technological innovations including e-commerce. She now heads an organization of 17 employees which provides ICT services with a broad profile of services ranging from web design to resell IT consumables. The owner/manager of SME_B was also highly educated, having a bachelor's degree in Telecommunications Engineer, and a master's degree from Australia. While still pursuing her master's degree, she started the online community for black women hair, which later led her to open the online store. The transition from interactive to transactive *was necessary because my customers are online all the time and so communication and most of my transaction are via social media* (SME_B). Both women had very good technical expertise, which was instrumental in shaping their movement towards a transactive e-commerce website. In addition to IT expertise, both women were exposed to international e-commerce websites that had reached the pinnacle of institutionalization. In this category is the owner/manager of SME_C who first established a small online business selling women's apparel through Facebook whilst completing her degree in agricultural science. Later, she attended two international internship programs in Brazil and Germany where she was exposed to further possibilities of integrated e-commerce. When she returned, she partnered with her husband to establish the country first online supermarket. Finally, the owner/manager of SME_F has a degree in architecture and manages an organization that offers exclusive local produced clothes for men and women all over Mozambique and abroad. The organization has a website with transactional capabilities; however, the only payment method available is PayPal. Our findings show that SMME owners/managers who moved beyond interactive to transactive stage were in the process of or had embarked on higher levels of education, international internships programs and were exposed to foreign organizations that had institutionalized e-commerce.

Integrated maturity stage

None of the SMMEs had progressive beyond the transactive stage to the integrated e-commerce system with external business partners and existing organizational systems and has most business processes conducted electronically (Miao & Tran, 2018). The key feature of this maturity stage is "online collaboration, where all business operations involving suppliers are integrated electronically" (Ocloo et al., 2018, p. 130). Whilst findings in this study show that SMEs had collaboration with external stakeholders, such as their customer base and suppliers, none of the SMEs had electronically integrated their business partners, specifically suppliers, into their systems. Communications with suppliers were mostly conducted via the mobile phone and emails. Therefore, even though organizations such as SME_F have been operating for many years, their collaboration with their business partners remained via mobile phone and emails. SME_D attributes this to business partners' resistance to e-commerce adoption as she explains: *suppliers are an issue, only very few have a more practical approach. For the others, we still have to go there by ourselves every time, some even don't accept POS, or electronic transfer, it is a nightmare*. In addition to resistance, *most affordable suppliers are either situated in the rural areas or remote area of the city centre and don't even have a bank account. We had to advise some of them to open bank accounts* (SME_C).

CONTEXT AND PROCESS

Internal contextual characteristics that influence institutionalization of e-commerce

The study differentiates between two contextually dependent characteristics of organizational activities: internal and external characteristics. One of the internal characteristics found to influence the institutionalization process was the manager's demographic factors of age and their experience and exposure to e-commerce and related technologies. SMMEs with younger managers who have international exposure and experience with e-commerce were found to be more engaged and enthusiastic with transcending to a more mature form of e-commerce than SMMEs with relatively older manag-

ers. This is an important finding in the context of Mozambique where the overall literacy rate is 47% with female literacy (28%) lagging far behind that of males (60%) (<https://www.usaid.gov/mozambique/education>). SMMEs that had either received exposure through their information technology education background, such as SME_A and SME_B, or in some cases, in addition to their IT educational background, had worked and used an e-commerce platform, such as SME_C whose experience in a foreign country showed how e-commerce was *convenient and easy and I wanted to create a service like that*, had transitioned to the transactive maturity stage of e-commerce by mimicking foreign organizations that they perceived to have successfully adopted and implemented e-commerce. Thus, the internal characteristics of the organization, specifically, the SME manager/owner's exposure to e-commerce, influenced its competitive strategy to adopt mimetic behavior which tend to be adopted "in the face of environmental uncertainty and/or complex environments, in order to gain legitimacy and reduce the risk of their ideas being rejected within the field" (Cottam, 2015, p. 47).

Given that e-commerce can be perceived as a new innovation in Mozambique, SMMEs engaging in this behavior were able to use their prior experience and exposure as well as their business networks in foreign countries to advance to a more mature e-commerce state. So, whilst mimetic behaviour traditionally stems from competitive pressures (Azmi, Sapiei, Mustapha, & Abdullah, 2016), the findings here show that the mimetic behaviour was first and foremost used as a means of addressing internal challenges of awareness of e-commerce and having access to IT expertise. For example, SME_B was able to become aware of and acquire technical experience whilst studying in Australia: *I was always a tech geek, so it took me almost 4 months, but I learned and managed to set up and administer all website by myself. I had more time and opportunities to learn about it.* Through this experience and *the business friends I made there*, SME_B was able to start an e-commerce business. Others, such as SME_C, were able to *obtain professional information on how to design and implement these systems from those in Brazil and Germany where I attended international internship programs.* Having access to such networks was perceived advantageous because, according to most respondents, there were few to non-existent internal employees with IT expertise locally and more importantly in the organization (SME_F). Whilst previous findings in other developing contexts have found these factors of organizational competence (availability of staff with sufficient experience and exposure to information and communications technology and other skills) as not being significant in comparison to factors of top management support (Al-Alawi and Al-Ali, 2015), findings in this study show that these competences are important for transition to a more mature form of e-commerce and significantly influence top management support – who in this case is the SMME owner/manager because "by nature of their size SMMEs are owner-managed (CEO) and as such, critical business decisions are typically made by a single owner/manager" (Hinde & Van Belle, 2012, p. 2)

Access to financial resources was cited as an important factor for attaining e-commerce sophistication. Respondents cited how costly it was to obtain *security certificates* required to ease consumer and trading partner's fears of the website's authenticity and safety, specifically in payments and privacy of personal data. These findings echo prior studies that SMMEs find complying to security of e-commerce website as a costly and in some cases time consuming task (Rahman & Lackey, 2013). Finally, social media and media phones were strongly perceived to facilitate institutionalization. In the case of SME_F, their journey through e-commerce began with social media platforms, and the website was introduced much later. Due to the nature of the business, they had significant number of customers from foreign countries which helped to shape the direction of e-commerce development in the organization. Social media was therefore used as a means of marketing and promoting their business and, in so doing, they were able to reach out to a greater market. E-commerce institutionalization in women-led SMMEs is therefore influenced by the (i) manager's demographic variables of age, education experience and exposure; (ii) mimetic behaviour arising from their exposure to (foreign) organizations in the same industry that have mature forms of e-commerce; (iii) the business networks they have developed with some of these organizations that have mature forms of e-

commerce; (iv) access to financial resources; and (v) social media technologies. These factors then influence the manager's commitment efforts towards e-commerce institutionalization.

External contextual characteristics that influence institutionalization of e-commerce

Four of the SMMEs were able to progress from an interactive maturity stage to a transactive maturity stage. This transition process was influenced by the external context. One of the external characteristics found to significantly influence SMMEs activities in this study was the limited support showed by the government when it came to SMMEs operating in the IT industry. The findings show that most SMMEs were aware of the policies enacted by the government for e-commerce and this could be attributed to their IT education background. A common perception amongst respondents was that both government stakeholders and the public lacked awareness of e-commerce and other technological innovations. They called for more engagement from government with the public and the industry *to educate its people* (SME_D) and foster awareness of the policies and legislation to *allow us and our customers to securely and comfortably use e-commerce* (SME_B). A unison concern from respondents was that government's lack of awareness of e-commerce translated into their [government's] lack of knowledge on how best to technologically assist SMMEs from technological, financial, and infrastructural points of view. For example, SME_E finds it challenging to continue providing services to clients located in some parts of the town *due to lack of street numbers, poor roads and the process is too expensive and time-consuming*; whilst SME_B *used my husband's assets as collateral to secure a loan instead of the government assisting us*. In the case whereby the main customer is the government, as is the case of SME_D and SME_E, the e-commerce institutionalization process is negatively impacted because governments in developing countries are known to be slow adopters of new technologies (Awiagah, Kang, & Lim, 2015). Therefore, the extent of institutionalization in these organizations is slightly low when compared with the other SMMEs in this study.

A second factor that influenced institutionalization was the inability of financial institutions to provide a support system for SMMEs, either in the form of securing a loan or providing the necessary support for e-commerce such as providing secure and reliable methods of payment. The payment method that was frequently used was the bank transfer system due to their limited availability and use of credit cards among customers as well as the lack of banks automating their systems (SME_B). Some SMMEs were not surprised at the lack of automation in some financial systems as they attributed this problem to the lack of IT expertise in the market capable of delivering fully functional systems. Even SMMEs (SME_D, SME_B) that opted for consulting firms to provide support and maintain their IT systems reiterated the lack of readily available IT expertise in the market, and they saw this as a challenge towards maturing to the next stage of e-commerce institutionalization. A third factor influencing institutionalization was local trading partners and consumer's low purchasing power due to the *economic recession in 2015 and 2016* (SME_A). Prior studies have shown how an economic recession can reshape consumer's purchasing habits through price sensitivity, which is one of the most important consumer behaviors during an economic recession (Pappas, Kourouthanassis, Giannakos, & Lekakos, 2017), and consequently influence an SMME's sales (Cowling, Liu, Ledger, & Zhang, 2015).

Finally, sociocultural practices embedded within the Mozambique context were perceived to be barriers towards institutionalization, specifically those related to women. For example, *prejudice* towards women-led SMMEs was a common problem from organizations led by men and even consumers, who would approach in a *very skeptical manner* (SME_D). These prejudices emanate from strongly held beliefs about gender roles (USAID, 2018) and traditional "customs and cultural habits ... which see many men finding it difficult to work under the command of a woman and to receive orders from her" (Asli & Nour, 2018, p. 394), and also make access to networks difficult due to social segregation (De Vita, Mari, & Poggesi, 2014).

Other sociocultural factors hampering institutionalization was the purchasing socializing effect in the Mozambique context that required the *greeting, feel, touch and bargain* (SME_B). Respondent SME_C

found that emulating this socializing effect online is difficult because the *e-commerce model does not fit this system* and, due to cost, not all local SMMEs were able to have physical stores through which customers could experience the socializing effect. International competitors, however, were able to do so and, as a result, the majority of SMMEs lamented (such as SME_A who was more vocal) on how international competitors *had resources which we don't and are able to appear professional* and through that easily gain trust from customers than local SMMEs operating in the same industry. Due to these challenges, SMMEs devised strategies to cope with competition and sociocultural practices. Firstly, they engaged in a cultural practice of *sharing business information and advice* (SME_A,C,D) amongst themselves and with their foreign networks who provide technical assistance. Secondly, SMMEs that did not have a physical store, like SME_A and SME_B, developed partnerships with local SMMEs that had physical stores in order to address the socializing effect expected from consumers. Thirdly, SMMEs used male figures, such as their husbands or employees, to pose as shop managers. As SME_A explains: *when we started getting many clients, I had to ask my husband to leave his job at a bank and come work with me. It helped with clients that did not trust me because I am woman*. By collectively pulling their efforts to develop organizational competences and pool resources through partnership so as to focus on the needs of local customers in the global marketplace, whilst averting sociocultural challenges in order to compete with international rivals, these SMMEs are seen as enacting both a defender and a contender strategy which allows them to remain competitive against foreign organizations (Hinkkanen, 2014). Prior studies have shown that local businesses in developing countries tend to adopt these strategies by focusing on their capabilities and resources to compete with multinational companies globally (Ensari, 2016). As a contender, the business focuses on developing skills and resources in order to compete with international rivals. Defenders, however, strive to maintain their current status in the local market against international rivals by, for example, avoiding clients that demand global brands and paying attention to clients who care more about the local needs (Ensari 2016).

DISCUSSION

The findings show how SMMEs transition from one maturity stage of e-commerce to the next. Two e-commerce maturity stages were observed – interactive and transactive. Both were enabled by various technologies, specifically websites, email, frequent mobile phone use and social media such as Twitter for communication, marketing and advertising both locally and internationally. SMMEs that were service providers and whose main customers were government entities and NGOs had lower levels of e-commerce institutionalization despite the SMME owners having either higher levels of education or extensive business experience. SMMEs that were not service providers and whose clients were not NGOs or government entities were able to transcend to a more mature form of e-commerce. Most of these SMMEs had high levels of education, experience and exposure towards e-commerce. This is a significant contribution given that human capital has been found to significantly affect the competitive advantage of SMMEs (Qamariah & Muchtar, 2019). None of the SMMEs had reached the pinnacle of institutionalisation – the integrated maturity stage. The transition from an e-commerce maturity status of interactive to that of transactive is shaped by internal contextual factors of (i) manager's demographic variables of age, education experience and exposure; (ii) mimetic behaviour arising from exposure to (foreign) organizations in the same industry that have mature forms of e-commerce; (iii) the business networks developed with some of these organizations that have mature forms of e-commerce; (iv) access to financial resources; and (v) social media technologies. These factors influence the owner/manager's decision to commit towards e-commerce institutionalization. From these findings, we observe that at the interactive level of e-commerce, the results support the findings of Garg and Choeu (2015) that the type of business and academic qualification influenced the extent of e-commerce institutionalization.

Our findings, however, go further to show that if the type of business services customers who are not ready for e-commerce, these SMMEs are unlikely to transcend beyond the interactive stage of e-commerce, despite the high levels of education, awareness and experience of the owner/manager. Therefore, transition from interactive to transactive e-commerce is firstly influenced by (i) the type of

business, (ii) and customer and trading partner's readiness for e-commerce; and secondly, influenced by the internal contextual factors. We can, therefore, infer that these factors create contexts that influence a manager's decision to institutionalise e-commerce. However, this decision becomes constrained by external contextual factors of (i) limited government intervention towards e-commerce endeavors; (ii) limited to lack of financial institutions readiness for e-commerce; (iii) lack of local available IT expertise; (iv) consumer's low purchasing power due to economic recessions; (vi) international competitive pressure; (vii) and sociocultural practices. The findings, although specific to Mozambique, have shown how women-led SMMEs at the transactive maturity stage of e-commerce employ the defender and contender strategy to compete with local multinational companies and resolve external challenges which create contexts that constrain e-commerce institutionalization. The contender strategy allowed SMMEs to focus on their organizational capabilities and resources including their foreign networks. Through these foreign networks, SMMEs are able to tap into a wealth of business and IT knowledge and shared experiences of other SMMEs. This is an important strategy because prior studies have shown how the resultant social capital gained from networks and competitive advantage significantly affect the business advantage of SMMEs (Qamariah & Muchtar, 2019). The defender strategy, which was mainly employed by SMMEs at the interactive maturity stage, was used to keep specific markets and customers – specifically NGOs and government. SMMEs servicing these customers had a practice of information sharing within this space, making it difficult for other entrants. Table 2 summarizes the findings in this study.

Table 2: Empirical findings of how women-led SMMEs in Mozambique institutionalise e-commerce

Themes derived		Key findings	Implications
Content	Interactive, Transactive and Integrated e-commerce	<ul style="list-style-type: none"> e-commerce is understood from the perspective of an interactive website coupled with the use of social media and mobile device usage. e-commerce maturity is determined by the extent of integration of the websites with new technologies such as social media. An SME owner's decision to progress to a more mature e-commerce phase is influenced by the type of business and industry they operate in. 	e-commerce is understood as having an interactive website coupled with the use of social media and mobile device usage, and institutionalization of e-commerce is determined by the extent of integration of the websites with new technologies such as social media as well as the type of business or industry in which the organisation finds itself. The business strategy is dependent on the maturity stage
	Business strategy: defender and or contender		
	Type of business and industry		
Internal Context	Manager characteristics (age and education)	<ul style="list-style-type: none"> The age and education of an SME owner influence their decision to progress to a more mature state of e-commerce. International exposure and awareness of e-commerce influences an SME's decision to progress to a more mature state of e-commerce. The decision to progress to a more mature form of e-commerce is influenced by the perceived derived benefits of initial adoption of e-commerce and or interactive commerce Cost implications associated with security and privacy of transactive or integrated e-commerce influences the decision to progress to a more mature form of e-commerce. 	<p>The decision to progress and commit to a more mature form of e-commerce is influenced internally by</p> <ul style="list-style-type: none"> (i) specific management traits of age, education, and international exposure; and (ii) the existence of internal resources linked to the availability of IT expertise, internet accessibility, and cost-effective security and privacy measures associated with a sophisticated e-commerce website.
	International exposure		
	Top Management Commitment		
	High Cost associated with security and privacy issues		
	Internet accessibility		
	Lack of internal expertise		

Themes derived		Key findings	Implications
		<ul style="list-style-type: none"> • Availability of reliable internet access influenced the decision to progress to a more mature form of e-commerce • The lack of internal expertise negatively influences the decision to progress to a more mature form of e-commerce 	
External context	Lack of Government support	<ul style="list-style-type: none"> • The decision of women-led SMMEs to progress to a more mature form of e-commerce is shaped by their perception of government's support in terms of (i) awareness of e-commerce (ii) institutional policies conducive for e-commerce and (iii) financial support. • The availability of financial institutions that support electronic payments, and context-specific payment arrangements such as direct bank transfers and mobile payments influenced the decision to progress to a more mature form of e-commerce. • The decision by women-led SMMEs in Mozambique to progress to a more mature form of e-commerce is influenced by the availability of adequate physical infrastructure such as roads and postal addresses • The lack of readily available ICT expertise is a barrier towards the decision to progress to a more mature form of e-commerce. • The decision to progress to a more mature form of e-commerce is influenced by management's perception of how the economic recession reshapes the shopping habits of offline and online consumers. • International pressure is more influential than local pressure for e-commerce institutionalization in women-led SMMEs in developing countries. • The Mozambican cultural practices of (i) socialising, (ii) information-sharing amongst SMMEs, (iii) gender stereotyping, (iv) and the need for feel and touch shape women-led SMMEs' decision to progress to a more mature form of e-commerce. 	<p>The decision to progress and commit to a more mature form of e-commerce is influenced externally by</p> <ul style="list-style-type: none"> (i) government support in terms of establishing awareness of e-commerce to the government, society, and the private sector at large; development and implementation of institutional policies conducive for e-commerce; and the provision of financial support systems; (ii) pressure from international trading partners, customers, and local economic pressure that affects consumer purchasing; (iii) the existence and readiness of supporting institutions such as financial institutions, technological and physical infrastructure institutions and IT experts; (iv) cultural practices of socializing, information sharing, gender stereotyping, and the need for feel and touch.
	Financial institutions not ready for e-commerce transactions		
	Lack of transportation infrastructure and postal addresses		
	Minimal IT experts in the market		
	Economic recession: Low customer purchasing power		
	Pressure from international suppliers, competitors, and customers		
	Socio-cultural practices		
Process	International hosting of websites	<ul style="list-style-type: none"> • International pressure is more influential than local pressure for e-commerce institutionalization in women-led SMMEs in developing countries. • The Mozambican cultural practices of (i) socialising, (ii) information-sharing amongst SMMEs, (iii) gender stereotyping, (iv) and the need for feel and touch shape women-led SMMEs' decision to progress to a more mature form of e-commerce. 	<p>The decision to progress and commit to a more mature form of e-commerce is influenced externally by</p> <ul style="list-style-type: none"> (i) government support in terms of establishing awareness of e-commerce to the government, society, and the private sector at large; development and implementation of institutional policies conducive for e-commerce; and the provision of financial support systems; (ii) pressure from international trading partners, customers, and local economic pressure that affects consumer purchasing; (iii) the existence and readiness of supporting institutions such as financial institutions, technological and physical infrastructure institutions and IT experts; (iv) cultural practices of socializing, information sharing, gender stereotyping, and the need for feel and touch.
	Integration of social media technology into their websites		
	Employment of and /or partnering with male business associates		
	Information-sharing practice		
	Investments in technology		

CONCLUSION

SUMMARY OF FINDINGS

Prior literature on e-commerce in SMMEs has tended to focus much attention on the adoption phase and presenting the numerous issues that enable and constrain adoption. Few of these studies have examined e-commerce in SMMEs post-adoption and from a gender perspective. Currently, there remains limited understanding as to why women-led SMMEs in developing countries struggle to institutionalise e-commerce after initial adoption. With this problem statement, the purpose of this study was to explore how women-led SMMEs in developing countries, specifically in the Mozambican context institutionalise e-commerce. A contextualist inquiry approach was adopted to focus on the ongoing interaction between the SME, its context, and the process of e-commerce institutionalization. The study was interpretive in nature, using in-depth interviews as a technique for data collection. The findings show that transition from one maturity state to another (interactive to transactive) was influenced by e-commerce is the internal and external contextual factors. The findings, although specific to Mozambique, have shown how women-led SMMEs at the transactive maturity level employ both the defender and contender strategies to address challenges which create contexts that constrain e-commerce institutionalization.

IMPLICATIONS OF THE FINDINGS

The owner/manager's demographic variables of age, education experience and exposure were the main significant internal contextual factor influencing institutionalization. Women with higher education experience and exposure in e-commerce were keener to adopt a mature form of e-commerce. The findings, however, show that regardless of the level of education and exposure, women still face sociocultural problems of, for example, prejudice in business, in comparison with their male counterparts. That is, whilst at organizational level demographic variables are instrumental for institutionalization, these same variables become overshadowed by sociocultural factors at operational and competitive level with other organizations, especially those dominated and led by men. These findings call for the importance of fostering mutual understanding, with the goal of reducing prejudice tendencies between women-led SMMEs, and other key stakeholders (financial institutions, the public at large, government as well as other organizations led by men), by improving engagement and information flows (Carter, Mwaura, Ram, Trehan, & Jones, 2015).

The main significant external contextual factor influencing institutionalization was the government's lack of engagement with e-commerce. Yet, government intervention in creating awareness of and educating itself, and the public about e-commerce and related technologies could lead to better ways of providing and implementing support systems for SMMEs and consequently lead to SMMEs institutionalization of e-commerce. These findings call upon government stakeholders to redress adoption and use of information communication technologies and related technologies such as e-commerce and social media in government and the country at large. Therefore, SMMEs institutionalization of e-commerce in LDCs is best achieved (i) when knowledgeable SMMEs (as presented by the demographic factors earlier) engage in defender strategies to secure their local market and contender strategies of focusing on their organizational capabilities and resources to compete with multinational companies globally; and (ii) whilst simultaneously engaging with other stakeholders to create awareness of e-commerce and foster mutual understanding by improving engagement and information flows (Carter et al., 2015).

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