

THE INFLUENCE OF DIGITALISATION ON WOMEN ENTREPRENEURSHIP PERFORMANCE: THE MODERATING EFFECT OF AGE AND EDUCATIONAL LEVEL

RAHABHI MASHAPURE

School of Entrepreneurship and Business Sciences, Department of Entrepreneurship and Business Management. *Corresponding Author Email: cmashapure29@gmail.com, ORCID: <https://orcid.org/0009-0002-6526-9169>

LOVEMORE CHIKAZHE

School of Entrepreneurship and Business Sciences, Department of Retail Management. Email: chikazhelb@gmail.com

TSITSI MUFUDZA

School of Entrepreneurship and Business Sciences, Department of Entrepreneurship and Business Management. Email: tmufudza@cut.ac.zw

MUNYARADZI CHIBARO

University of Botswana, Supply Chain Management. Email: chibarom@ub.ac.bw

Abstract

Entrepreneurship digitalisation is a powerful tool of boosting business performance. However, little is known about how digitalisation can enhance women entrepreneurship ventures. In this study, by building upon the Technology Acceptance Model we address that gap by investigating how entrepreneurship digitalisation dimensions (perceived usefulness of digital technology, perceived ease of use of digital technology and voluntariness on the use of digital technology) enhance women entrepreneurship performance. The variables are moderated by age and level of education. Being guided by the positivism philosophy, researchers collected data using a structured questionnaire and the data were analysed using the Structural modelling equation in SPSS V25, and in AmosV25. The present study used a sample size of 200 women entrepreneurs. Convenience sampling was used to select respondents who participated in the cross-sectional survey. A self-administered structured Likert type scale questionnaire was used to collect data. The study found that perceived usefulness of digital technology, perceived ease of use of digital technology and voluntariness on the use of digital technology influence women entrepreneurship performance. The study found that the effect of entrepreneurship digitalisation on women entrepreneurship performance is stronger in young than in older women. It was also found that the effect of entrepreneurship digitalisation on women entrepreneurship performance is stronger in highly educated than in less educated women. Studies that have investigated the influence of entrepreneurship digitalisation on women entrepreneurship performance in an emerging economy like Zimbabwe are scarce. Thus, the current study was conducted to further the understanding of the inclusion of entrepreneurship digitalisation in the performance of women entrepreneurship businesses.

Keywords: Entrepreneurship Digitalisation, Women Entrepreneurship Performance, Zimbabwe.

1. INTRODUCTION

A country's industrial growth determines its economic development (Rosin et al., 2020). The entrepreneurial skills for people are the foundation of industrial progress. Therefore, it is imperative that the idea of fostering entrepreneurship promotion be implemented.

According to Abbasianchavari and Moritz (2021), women's involvement in business is essential for long-term progress and success. Given their potential, it is necessary to examine how women differ from males in terms of their behaviour and thought processes. Gender inequalities, or the societal divide between men and women, also imply differences in terms of commercial, social, and economic prospects. According to Opute et al. (2021) entrepreneurial activities play a significant role in both generating and expanding employment opportunities and promoting economic growth. In the twenty-first century, the topic of entrepreneurship performance through the creation of micro and small businesses is receiving more attention. Numerous studies demonstrate that the success of women-owned micro and small enterprises, or MSEs for short, is crucial to a country's growth (Shakeel et al., 2020) and to societies' well-being since it generates wealth, jobs, and innovations (Mozumdar et al., 2020). But compared to men, women are less likely to run profitable firms or ventures. In the first five years of their business, start-ups and new enterprises may have failure rates of up to 60% (Merressa, 2020). Whether in a management or entrepreneurial role, women who want to launch any kind of business typically face numerous environmental barriers.

According to a recent research study, the proportion of adult working-age women on different continents who engage in entrepreneurial activities is 10.2%, or almost three-quarters that of men (Ingalagi et al., 2021). Women are more likely to start their own businesses in Sub-Saharan Africa (21.8%) than in Europe, the Middle East, and Northern Africa (6%), according to Hart et al. (2019). According to a recent global survey, women are just 4% less likely than males to say that they intend to launch a business in the next three years (17.6% on average) (Kumar et al., 2020). It's interesting to note that low-income nations have greater rates of these entrepreneurial inclinations, followed by middle- and higher-income nations (Hart et al. 2019). According to a recent global survey, women are just 4% less likely than males to say that they intend to launch a business in the next three years (17.6% on average) (Ingalagi et al., 2021). It's interesting to note that, according to Hart et al. (2019), these entrepreneurial inclinations are more common in low-income nations than in middle- and higher-income nations. Economic and social growth can be greatly aided by the involvement of women in entrepreneurship (Ozaralli & Rivenburgh 2016).

Policies like as the industrial policy, the SMEs development strategy, and the growth and transformation plans I and II to accelerate growth and alleviate poverty highlight the significance of women-owned businesses in Ethiopia (Meressa, 2020). Notwithstanding this, women-owned SMEs' performance and growth continue to be causes for worry, even if the number of women starting and operating their own businesses has increased across the nation. Furthermore, a number of factors have consistently influenced the performance of women-owned SMEs; these include educational attainment, prior experience as an entrepreneur, availability of capital, information, and training for businesses; government backing; property ownership, and taxation are important in explaining the performance of women entrepreneurs; even though the number of women interested in business is increasing in Ethiopia, their success is still minimal (Alene, 2020). However, it is discovered that factors such as age, marital status, market accessibility,

and availability of physical infrastructure have little bearing on how well women entrepreneurs do (Corrêa et al., 2022).

The presentation and analysis of data from the Federal Office of Statistics, the National Bureau of Statistics, and the Small and Medium Enterprise Development Agency of Nigeria took up a significant amount of time. It was found that women make up 42.1% of the ownership structure in the microbusiness (informal sector), where they participate at a higher rate than men (Etim, & Daramola, 2020). In the formal sector, their performance is 13.57%, compared to 86.43% for male entrepreneurs (Aliyu et al., 2020). The limitations they experience are the cause of their subpar performance and contribution. Additionally, it was found that by 2012, they were performing better in the education and service sector than they had in the trade and agricultural sector in 1997 (Aliyu, 2013).

India's women have undergone transformations: they are no longer goddesses but devadasis, pure and vulgar, dominant and oppressed (Mandongwe & Jaravaza, 2020). Indian women have faced identity crises and suffered on many fronts as a result of the tremendous and radical changes in their role in society. For women, there was a "no" that matched every "yes," and vice versa (Mozumdar et al., 2020). Women found it difficult to define their place in society and their significance, and this atmosphere frequently breeds doubt. Since mid-1991, the Indian economy has seen a gradual but significant transformation due to changes in economic policies pertaining to liberalisation, globalisation, and privatisation. India's female entrepreneurs are beginning to acquire traction as a result of this commercial extension, which has exposed the nation to global realities. Women's entrepreneurship is one of the key tools for establishing empowerment and improving quality of life. The discrepancy between men and women involved in entrepreneurial activities has been referred to as the gender gap in this field. Few researches examines gender disparities in entrepreneurship, and the majority of studies on the individual level of entrepreneurship concentrate on male entrepreneurs (Corrêa et al., 2022; Mohsin & Lei, 2020).

The literature currently in publication suggests that women-owned enterprises outperformed men-owned ones by a little margin, although other studies reveal no differences in entrepreneurial success depending on gender (Cheng, 2019). In fact, there is debate over whether women's firms perform worse or fail more frequently than those owned by males. Therefore, it is the researcher's responsibility to investigate the critical elements influencing the noteworthy outcomes regarding the success of women entrepreneurs. Global Entrepreneurship Monitor (GEM) estimated in 2012 that 126 million women had founded or were operating new firms in around 67 different countries worldwide. Furthermore, 98 million women run well-established enterprises.

It is important to recognise that SME entrepreneurs are the backbone of every nation, based on the available data and research. Nevertheless, the majority of economies—both emerging and developed—do not acknowledge the innovative role that women have played in driving national development. Although they contribute significantly and in a particular way to economic development, women are still largely marginalised. In contrast to many civilizations that see women as second-class citizens, the Zimbabwean

government is currently focused on the rise of women entrepreneurs under the slogan "Vision 2030" (Chitando et al., 2020). When it comes to the profitability and expansion of a business, women entrepreneurs are not as successful as men entrepreneurs (Yasir et al., 2021). But in order to take advantage of every market and financial opportunity, women entrepreneurs suffer more than males do (Mashapure et al. 2022). According to several studies, women are more capable than men at managing a company, providing for their families, and fostering the vital economic growth (Ali et al., 2023). This demonstrates how women entrepreneurs may contribute significantly to the nation's and business society's recovery from its losses.

While many nations view women entrepreneurs as crucial agents of economic growth, their contributions to Zimbabwe's economy have not yet materialised as anticipated (Mashapure et al., 2023). Few Zimbabwean women entrepreneurs have succeeded in growing their businesses to extraordinary heights; most struggle to perform better in their entrepreneurial endeavours (Mandongwe, & Jaravaza, 2020). In Zimbabwe, women-owned enterprises continue to be in the minority, and the difficulties they confront are numerous and frequently dissimilar from those faced by their male counterparts (Etim, & Iwu, 2019). Furthermore, the majority of well-known enterprises still use traditional technology, and women entrepreneurs lack knowledge about modern technologies. The Zimbabwean government has made significant financial contributions to the success of women entrepreneurs by allocating money from the annual national budget and partnering with various countries and organisations for same (Moreno-Gavara et al., 2019). But the industry is still undeveloped, with a large number of unregistered women-owned enterprises that, contrary to what is said by (Mpofu, 2021), do not actually contribute to the public coffers.

On paper and in terms of policies, the country's infrastructure for promoting women entrepreneurs is still strong, but there isn't political will to make it operational. Regarding Zimbabwe, a cursory examination of the situation there indicates certain barriers that negatively impact women. In order for women to take advantage of this enormous potential, the right steps must be taken to lessen the obstacles that they face. There is concern that if very few or no women take their firms to even bigger and more stunning heights, the government and its supporting structures may lose resources on a constant basis. Better plans are also required in the event that worldwide pandemics such as COVID-19 recur, as limited mobility may prevent women entrepreneurs from having direct access to daily operations, business management, and markets. Previous relevant investigations have been carried out in an attempt to tackle this issue (Myovella et al., 2020; Lichy et al., 2021). But none of these academics looked at the impact of digitalization on entrepreneurship and how it helps women entrepreneurs, particularly in developing nations like Zimbabwe. Also absence of the moderation effect of age and educational level prompted the study. Consequently, the lack of information in this field is the inability to fully comprehend how company digitalization might support women's entrepreneurship. This study examined the impact of entrepreneurship digitalization on women entrepreneurs' performance in Zimbabwe in an effort to close this gap and add to

the body of knowledge in management and entrepreneurship. The study was guided by these research hypotheses:

H₁: Perceived usefulness of digital technology positively influence enhanced women entrepreneurship.

H₂: Perceived ease of use of digital technology positively influence enhanced women entrepreneurship.

H₃: Voluntariness on the use of digital technology significantly impacts the influence of women entrepreneurship performance

H₄: The effect of entrepreneurship digitalisation on women entrepreneurship performance is stronger in young than in older women.

H₅: The effect of entrepreneurship digitalisation on women entrepreneurship performance is stronger in highly educated than in less educated women.

2. LITERATURE REVIEW

Theories underpinning the study

Perceived utility and perceived ease of use are two significant concepts that were proposed by the Technology Acceptance Model (TAM2). According to Davis (1989), perceived usefulness is the extent to which an individual feel that utilising a specific system would improve his or her performance at work, whereas perceived ease of use is the extent to which an individual believes that utilising a specific system would require no effort on their behalf. According to TAM, users' behavioural intention and actual usage are determined by their perceptions of perceived usefulness and simplicity of use. Numerous investigations have validated these constructs' causal links empirically. According to Davis (1989), perceived utility and technology usage are directly impacted by perceived simplicity of use. The TAM has been one of the most important research models in examining the factors influencing IT usage over the past 20 years (Chau & Hu, 2001). The degree to which prospective adopters believe the adoption choice is voluntary is known as voluntariness. While voluntariness was excluded from the initial set of innovation characteristics put forth by Moore and Benbasat (1991) added it as a factor influencing usage behaviour. As a result, we would like to investigate the idea that voluntariness serves as a moderator in the beliefs intending behaviour, as suggested by Venkatesh and Zhang (2010).

TAM contributes to the research by understanding multiple factors related to venture creation. It incorporates the functions of perceived utility and usability, as well as the importance of outside factors like social influence in influencing attitudes. People will use digital technology with the attitude and intention that come with having these items (TAM) in place. Nevertheless, the existence of these variables is insufficient as, given individual differences, the view of women entrepreneurs may vary based on age.

2.1 Entrepreneurship digitalisation

Entrepreneurship digitalisation is characterised as the creation and pursuit of entrepreneurial possibilities through the use of technology platforms and other information-communication tools (Giones & Brem, 2017). In line with Le Dinh et al. (2018) “digital entrepreneurship is a subcategory of entrepreneurship in which some or all of what would be physical in a traditional organization has been digitised” and thereby can be seen “as the reconciliation of traditional entrepreneurship with the new way of creating and doing business in the digital era”. According to Myovella et al. (2020), digital entrepreneurship is generally well-defined as starting new enterprises and changing established ones through the development of innovative digital technologies and/or innovative applications of those technologies. The current study understands entrepreneurship digitalisation as making use of digital tools, resources, and systems for generating, storing, and managing data. Thus, women entrepreneurs connect with customers and stakeholders through the Internet using gadgets like laptops, tablets and android cell phones.

According to Myovella et al. (2020), the term "digital entrepreneurship" refers to any new endeavours as well as the transformation of current companies that use innovative digital technology to create and deliver economic and/or social value. Three categories of digitalization exist for entrepreneurship (Rosin et al., 2020). The first type of digitalization, known as light entrepreneurship, is entering the digital economy to augment more conventional settings. The second type of digitalization, moderate entrepreneurship, calls for a strong emphasis on digital distribution, products, or other digital aspects of the company. Without the digital infrastructure, moderate entrepreneurial digitalization would not be possible. In the third type of entrepreneurship, known as extreme digital entrepreneurship, all aspect of the business, including production, the actual goods or services, advertising, distribution, and clientele, is done digitally. The businesses on the cutting edge are those who sell digital goods and services, modify already-existing digital items, and maybe even carry out transactions using digital currency. Additionally, the challenges of entrepreneurship for small businesses differ greatly from those experienced by their more established rivals. The contexts that allow us to understand the differences between traditional and digital entrepreneurship, as well as those among the three forms of digital entrepreneurship, are ease of entry, ease of manufacturing and storing, ease of distribution in the digital marketplace, workplace, digital goods, digital service, and digital commitment.

2.1.1 Perceived usefulness of digital technology

The degree to which an individual feel that utilising a specific digital technology would improve his or her ability to accomplish their work is known as perceived utility of technology (Davis, 1989). This occurs when a potential user has a personal belief that utilising a certain application system will improve their ability to accomplish their job in an organisational setting. The perceived value of digital technology is contingent upon a person's beliefs; an individual develops an attitude towards a particular object, which in turn informs their desire to behave in a particular way towards that thing (Van van Heijden,

2003). Put differently, perceived utility of digital technology refers to the degree to which female entrepreneurs think that utilising digital technology in their businesses will improve task performance.

2.1.2 Perceived ease of use of digital technology

The term "ease of use" describes a person's opinion of how simple or easy it is to utilise a certain system (Davis, 1989). Because of this, it is thought to be among the characteristics that has the biggest influence on whether or not a new digital technology is accepted (Moore & Benbasat, 1991). According to Davis et al. (1989), because of its instrumentality and self-efficacy, simplicity of use has a dual effect on attitude. One can argue that efficacy plays a major role in the development of intrinsic motivations, or the drives that direct attention to one's surroundings. However, as demonstrated by the TAM, enhancements in usability can also be crucial, leading to higher performance through utility (Kishore & Sequeira, 2016). Perceived ease of use of technology is defined by Van van Heijden (2003) as the degree to which people think utilising digital technology would be effortless. The researcher described it as the belief held by female entrepreneurs that utilising digital technology in their enterprises is simple and uncomplicated.

2.1.3 Voluntariness on the use of digital technology

The degree of free will involved in adopting digital technology is referred to as voluntariness in its use (Wu, & Lederer, 2009). The degree to which the use of the invention is viewed as voluntary or requiring free will is the definition of voluntariness when it comes to digital technology use (Moore & Benbasat, 1991). The degree to which prospective adopters believe the adoption choice is voluntary is known as voluntariness (Agarwal & Prasad, 1997). According to Kijasanayotin et al. (2009), voluntariness is defined as an individual's perception of their degree of agency in using or not using digital technology. It is a crucial notion that determines the intention to utilise information technology. Moore's (1989) dissertation demonstrated how attitudes towards usage are influenced by the perceived voluntariness of use, and how attitudes towards usage predict use. One's attitude towards usage predicts use less the less voluntary the activity is (Kijasanayotin et al., 2009).

2.2 demographic factors

According to Fahmi and Savira (2023) old women entrepreneurs with age more than 65 years are late adopters of technology in businesses. The researchers further observed that the level of education increases the likelihood of technology adoption in women entrepreneurial activities. According to them, women entrepreneur's profession correlates positively with the old women entrepreneur's adoption of digital technology in business. This was supported by Chatterjee et al., (2022) indicating an existence of a relationship between internet banking adoption and educational level, occupation, age and income. In contrast to these assertions, some researchers argued that there are no significant differences in internet usage based on age or educational level. Whilst most researches suggested that younger individuals are more inclined to accept an innovative information technology, other research findings do not support these suppositions. Rahi, Khan and Alghizzawi (2021) found that age does not really matter in the acceptance and use of

internet banking. Contrary to the assertion by some researchers that higher level of education increases technology adoption, Chatterjee, Chaudhuri, Vrontis and Thrassou (2022) found that women entrepreneurs with higher education are less likely to adopt internet banking as a cautious behaviour towards internet banking.

2.3 Entrepreneurship performance

The act of carrying out or doing work, as well as entrepreneurial success or failure, are all considered forms of entrepreneurial performance (Mozumdar et al., 2020). It also addresses the achievement of entrepreneurial objectives through the use of planned mechanisms and accessible resources. According to Platin and Ergun (2017), "the achieving of set entrepreneurial goals" is the definition of entrepreneurial performance. Ladzani & Van Vuuren (2002) define entrepreneurial performance as making use of the chances that are available to build the business.

Entrepreneurial performance refers to a person's capacity for success in a variety of fields, such as medicine, retail, suppliers, marketing, etc., and how this helps them get better results in negotiations in order to build successful businesses (Shakeel et al., 2020). Promoting core business concepts, creating new goods, seeing market opportunities, creating a contemporary environment, cultivating positive investor relationships, and being prepared to respond to remarkable market trends are all components of entrepreneurial achievement (Kickul et al., 2010). The founder uses performance as a benchmark to gauge success. In the entrepreneurship sphere, the terms "new venture survival," "growth," and "success" have been used interchangeably to describe business organisation success.

3. EMPIRICAL LITERATURE AND HYPOTHESES DEVELOPMENT

Cheng (2019) conducted a study to assess the degree to which the constructs—perceived usability and perceived security of the website as independent variables, perceived usefulness and attitude as intervening variables, and intention to use as the dependent variable—have any hypothesised relationships. The findings validate the robustness of the expanded TAM model in forecasting customers' desire to use online banking.

According to Cheng (2019), utilising digital technology speeds up task completion. Citing Venkatesh and Zhang (2010) and Azman and Zabri (2022), it was discovered that an individual's reported propensity to use mobile banking is determined by perceived usefulness. Likewise, Majumdar and Pujari (2022) determined that perceived utility was an important component. Similar to how Majumdar and Pujari (2022) determined perceived utility to be an important factor and came to the conclusion that relative benefits have a substantial impact on an individual's desire to consider elements influencing an individual's decision to use mobile banking.

According to Le Dinh et al (2018), using digital technology increases a business's effectiveness and makes it easier to stay in touch with customers. Perceived utility is a key predictor of digital technology adoption, according to Chau and Hu (2001). According

to numerous other studies, people's acceptance and use of different technologies are mostly motivated by their perceived utility (Rafique et al., 2019). In certain research, perceived usefulness has a direct impact on usage intentions in addition to its attitude-based influence (Davis et al., 1989) and, in others, revealed a much stronger impact over future IT/IS use than ease of use (Hastie, 2022).

According to Hastie (2022) ease of use had a far lesser influence on future IT/IS adoption than did ease of use. However, some research (Acharya & Ganesan, 2019) found no evidence of a significant relationship between perceived utility and anticipated future usage of IS. According to Rosin et al. (2020), a key element in deciding how innovations are adapted is perceived utility. Therefore, the likelihood of electronic banking being adopted increases with the perceived utility of using such services (Baabdullah et al., 2019). In light of this conversation, the following hypothesis was made:

H₁: Perceived usefulness of digital technology positively influence enhanced women entrepreneurship.

The term "ease of use" describes a person's opinion of how simple or easy it is to utilise a certain system (Davis, 1989). Because of this, it is thought to be among the characteristics that has the biggest influence on whether or not a new digital technology is accepted (Moore & Benbasat, 1991). According to Davis et al. (1989), because of its instrumentality and self-efficacy, simplicity of use has a dual effect on attitude. One can argue that efficacy plays a major role in the development of intrinsic motivations, or the drives that direct attention to one's surroundings.

However, the TAM (Motwani & Sharma, 2016) has demonstrated that improvements in usability can also be crucial, leading to higher performance through utility. Specifically, according to Cheng (2019), it is the degree to which people think adopting digital technology will be effortless. According to some studies, a system that is simple to use will be adopted more extensively than one that is more complex (Ali et al., 2023). The researcher described it as the belief held by female entrepreneurs that utilising digital technology in their enterprises is simple and uncomplicated. Thus, it was postulated that:

H₂: Perceived ease of use of digital technology positively influence enhanced women entrepreneurship.

According to Chau and Hu (2001), an individual's attitude towards innovation adaption can be defined as either positive or negative. According to Azman et al. (2022), attitudes are a reflection of people's positive or negative feelings towards a certain behaviour. As a result, attitudes evolve throughout time as people gain experience. This suggests that a positive outlook enhanced businesses' readiness to employ digital technology. The findings indicated that my behaviour in managing the firm has been positively impacted by my voluntary usage of digital technologies.

The findings align with the theoretical frameworks (TAM, TRA, and TPB) which demonstrate that attitude is a crucial prerequisite for the desire to cultivate a specific behaviour (Kijisanayotin et al., 2009). According to Hastie (2022), attitude is a multifaceted

concept made up of three different dimensions: cognitive, affective, and behavioural. This confirms the widespread belief in the literature that women's entrepreneurship success is positively impacted by voluntariness in the usage of digital technologies. It was therefore postulated that:

H₃: Voluntariness on the use of digital technology significantly impacts the influence of women entrepreneurship performance.

Prior studies (Fahmi & Savira, 2023), (Chatterjee et al., 2022), (Wong et al., 2020) finds that age of users has an important effect on their behaviour. Youssef et al., (2021) adds on that a population of women who are diverse in age shows a number of different values, preferences, and experiences making it extremely likely that all their activities create scope for different opinions to be expressed and different approaches to problems. This diversity improves the digital technology adaptability, leading eventually to more innovation, quicker and flexible problem-solving processes with better results and employee performance.

Results from this study were in line with (Liébana-Cabanillas et al., 2012) who found that typical users of electronic banking were relatively young. Wyslocka et al., 2017) discovered that the elderly had more resistances to change and negative attitude toward using mobile banking services. These results were supported by (Ariff, Yeow, & Zakuan, 2014) found that typical mobile banking users were aged between 30 and 49 and middle-aged or older customers were the main users of electronic banking. Additionally, (Merhi et al., 2021) randomly interviewed 300 respondents in the streets in six major Chinese cities and reported that mobile banking main users were young and highly educated (Laforet & Li, 2005).

Haile (2015) investigated 3585 respondents in Brazil and claimed that older people perceived mobile banking as more difficult to use than younger people did. Likewise, by collecting 666 respondents in Brazil, Puschel et al. (2010) observed that typical users of mobile banking were less than 30 years old (Trinh, Le, & Nguyen, 2020). Based upon the above conflicting results, this is a need to ascertain the moderating effect of age. Therefore, it was hypothesised that:

H₄: The effect of entrepreneurship digitalisation on women entrepreneurship performance is stronger in young than in older women.

Magsamen-Conrad and Dillon (2020) observed that tertiary education enhances the broadening of knowledge and expertise of employees within any organisation. Additionally, Abbas Tarhini et al., (2019) believed that the main motive of modern businesses is intellectual awareness and more trained employees, to maintain its competitive advantage on the global market, the more an enterprise becomes more positioned and developed. Therefore, the more women are trained, they will know the scope and expectations and depth of their jobs and would attach building blocks to their professionalism that will improve on their progress as a factor of entrepreneurship enhancement.

Research by Abu-Shanab (2011) show that higher education allows farmers to make efficient adoption decision and early adopters who can take advantage of new digital technology are likely to extract maximum profit. Highly educated entrepreneurs also tend to adopt digital technology with greater intensity (Lazar, Panisoara, & Panisoara, 2020). Kinyangi (2014) found that issues of digital technology and digital literacy is particularly prevalent in the context of poverty entrepreneurship in developed economies, where educational systems are challenged to provide general literacy, to the detriment of providing the poor with comprehensive learning environments to develop digital technology and digital literacy. Contrary to the assertion by some researchers that higher level of education increases technology adoption, Chatterjee, Chaudhuri, Vrontis and Thrassou (2022) found that women entrepreneurs with higher education are less likely to adopt digital technology as a cautious behaviour towards entrepreneurship digitalisation. Eisenberg and Johnson (2002) suggested that a technologically literate person can “use digital technology as a tool for organization, communication, research, and problem solving.” The level of education affects innovation, creativity and eventually productivity. Intellectual capital is a vital element responsible for digitalisation of any business. Thus it was hypothesised that:

H₅: The effect of entrepreneurship digitalisation on women entrepreneurship performance is stronger in highly educated than in less educated women.

3.1 Conceptual framework

Figure below summarizes and illustrates the hypothesised relationships based on the foregoing discussions.

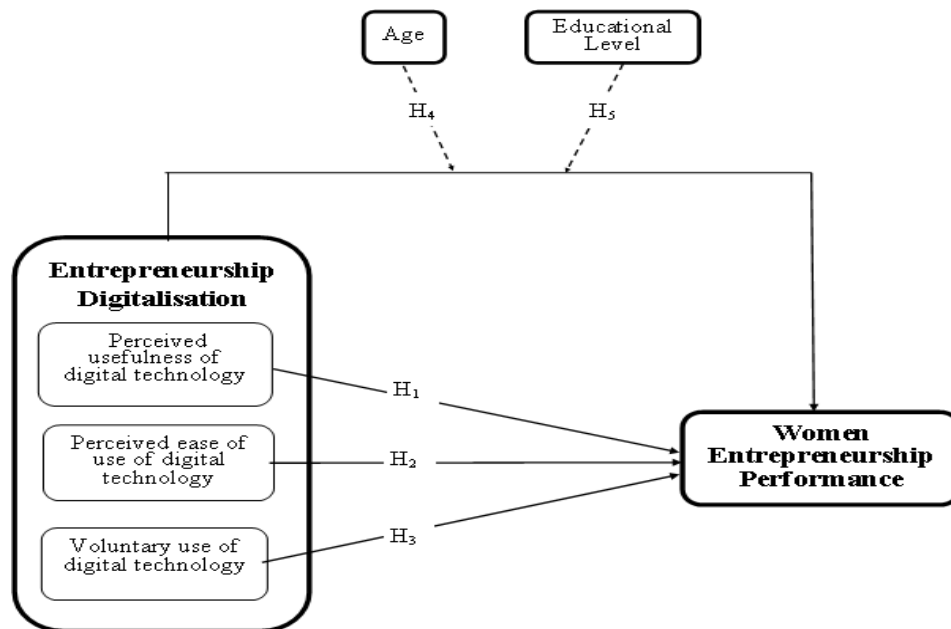


Figure 1: Conceptual framework

Source: Author (2024)

4. METHODOLOGY

This study embraced a positivist paradigm research philosophy because it recognizes that using a quantitative approach can lead to superior outcomes. Since a cross-sectional survey offers an evaluation of exposure and outcome in a sample of the population at a particular point in time, it was chosen (Kumar et al., 2020).

The study's participants were female entrepreneurs in Zimbabwe's Mashonaland West area. The province was chosen because is a true representation of Zimbabwean other provinces as it consists of almost every entrepreneurial activity done in other provinces within the country. The respondents were in retailing, manufacturing, services, processing, farming and digital technology.

The present study used sample size of 200 women entrepreneurs which was determined using the RAOSOFT sample size calculator. The sample size is also in line with related studies by Shakeel et al (2020) and Alene (2020) who used a sample of 203 and 180 respectively. Thus, the researcher found it fit to use a sample size of 200 since similar research on women entrepreneurship performance sample sizes are within the same range.

The convenience sampling method was used in accessing the sample due to its higher degree of accuracy, high statistical power and easy-to-use (Alharahsheh & Pius, 2020). The five-point Likert scale structured questionnaire was developed and used to collect primary data. The Likert scale ranged from 1-strongly disagree to 5-strongly agree and the respondents were asked to show their response by the use of a tick or a visible mark.

The items used in instrument design were borrowed from previous related studies (see Table 1) and modified to suit the current studies. Table 1 presents items and sources for the study instrument.

Table 1: Research instrument

Variable	Items	Source
Perceived usefulness of digital technology (PUOT)	Digital technology makes it easy to stay in touch with customers	Venkatesh and Zhang (2010)
	Business' effectiveness increases because of the use of digital technology	
	Business' productivity increases due to the use of digital technology	
	Digital technology makes it easy to collaborate with business partners	
	The use of digital technology enables business to accomplish tasks more quickly	
	Digital technology improves communication speed through automation of Information	
	Items	Source
Perceived ease of use of digital	Using digital technology makes it clear and understandable in any business	Cheng et al., (2006)
	Digital technology requires a lot of mental thinking	

technology (PEOU)	Using digital technology makes it easy to learn more in business	
	Using digital technology makes it easy to become skilful	
	Digital technology makes it easy for me to work remotely	
	Digital technology helps in reducing operating expenses	
	Items	Source
Voluntariness in the adoption of digital technology (VIUT)	Personal innovativeness helps adopt digital technology and use it	Zhang et al., (2018)
	Positive attitude towards digital technology helps adopt digital technology	
	Entrepreneurs enjoy using digital technology in their businesses	
	Using digital technology in a business helps yield satisfaction	
	Perceived voluntariness of business is predictor of innovativeness in a business	
	Voluntary use of digital technology positively influences the behaviour towards managing the business	
	Items	Source
Women Entrepreneurship Performance (EDWE)	Digitalisation speed up the business operations leading to the attainment of goals	Corrêa et al. (2022)
	Stakeholder management increases through the use of digital technological communication platforms	
	Digitalisation help production of wide range of customised products according to customer's specifications	
	The adoption and implementation of digitalization allows increased administrative/ managerial commitment	
	The firm's digitalization means knowledge can be shared with the suppliers of digital technology and business performance is a result	
	The firm's adoption of digital technology can be fundamental in increasing collaboration with customers	
	Customer feedback on the digital technology adopted brings benefits for the firm	
	The adoption of digital technology can increase knowledge-sharing with customers (commercial and technical information)	

Source: Author (2023)

5. RESULTS AND DISCUSSIONS

5.1 Respondents rate

Women entrepreneurs were the targeted respondents during data collection with regards to the women entrepreneurship performance through entrepreneurship digitalisation. A total of 200 questionnaires were physically administered to women entrepreneurs in Mashonaland West province, Zimbabwe. Ninety-nine percent (94.5%) of the distributed surveys were returned and deemed usable. Table 2 represents demographic data of the respondents by age, marital status and level of education.

Table 2: Demographic data

Characteristic	%
Age	
Less than 30	2.4
30 – 39	14.1
40 – 49	23
50 – 59	39
59 and above	21.4
Marital status	
Single	6
Married	38
Widow	56
Education	
Below diploma level	52.6
Diploma	36.6
Degree	8.7
Masters	2.2

Source: Author (2023)

Table 2 results indicate that the majority of female entrepreneurs (39%) belonged to the 50–59 age range, with 23% following in the 40–49 age bracket. Only 2.4% of female entrepreneurs said they were under 30 years old, while 14.1% said they were between 30 and 39 years old. Given that 97.5% of the women were 30 years of age or older, it is implied that women become more active entrepreneurs as they age. These results are consistent with research conducted in Kenya by Nyaki (2020). They discovered that women often start thinking about starting a business in their late thirties. There may be various reasons for it such as lack of support from family, need to look after extended family, involvement in other jobs, child care and others may be few of them.

Results in Table 2 show that most women entrepreneurs in Mashonaland west (56%) are widows. This was followed by 38% of the women entrepreneurs who indicated that they are married. Only 6% of the women entrepreneurs indicated that they are single. This signifies that as women become widows they tend to be entrepreneurially active and engage into entrepreneurship more than when they were single and married. Survey research disagree to Mohsin and Lei (2020) who found that majority of the participants were married. Table 2 shows that 52.6% of the respondents had below diploma level. Another 36.6% of them indicated that they have attained diploma education level while 8.7% of them had degrees. Only 2.2% of them had a master’s level of education. Arguably it can be deduced that a good percentage of women entrepreneurs in Mashonaland west have attained basic education.

5.2 Convergent validity test results

Measuring model fit indices, composite reliability, standardised factor loadings, individual item reliabilities (squared multiple correlations), critical ratios, and average variance extracted (AVE) were used to evaluate convergent validity. Constructs, standardised factor loadings, and critical ratios are shown in Table 3.

Table 3: Constructs, standardised factor loadings and critical ratios

Construct	Items	Standardised Factor Loadings	Critical Ratios
Perceived usefulness	PUOT1	.695	-
	PUOT2	.759	22.139***
	PUOT3	.796	28.796***
	PUOT4	.642	20.255***
	PUOT5	.678	21.922***
	PUOT6	.862	24.932***
	PUOT7	.658	20.875***
Perceived ease of use technology	PEOU1	.727	-
	PEOU2	.948	37.215***
	PEOU3	.949	39.464***
	PEOU4	.947	38.253***
	PEOU5	.924	37.112***
	PEOU6	.986	39.922***
Voluntariness in the adoption	VIUT1	.740	-
	VIUT2	.843	20.922***
	VIUT3	.910	20.922***
	VIUT4	.870	20.922***
	VIUT5	.778	20.922***
	VIUT6	.650	20.922***
Entrepreneurship digitalisation	EDWE1	.723	-
	EDWE2	.832	25.514***
	EDWE3	.957	37.564***
	EDWE4	.811	25.234***
	EDWE5	.753	20.534***
	EDWE6	.803	20.342***
	EDWE7	.854	22.148***
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 4 iterations. Total variance explicated 79.88%			

Note: - CR is fixed; *** p < 0.001

Source: Author (2023)

According to Table 3, standardised factor loadings and critical ratios were acceptable and the total variance explicated was way above the standard limit of 60% as postulated by (Platin & Ergun, 2017). Thus, convergent validity was achieved.

The measurement model fit indices, namely, χ^2/DF -1.987, Goodness of Fit Index (GFI)-0.912, Adjusted Goodness of Fit Index (AGFI)-0.903, Normed Fit Index (NFI)-0.921, Tucker-Lewis Index (TLI)-0.917, Comparative Fit Index (CFI)-0.948 and root mean square error of approximation (RMSEA)-0.043 were acceptable. χ^2/DF should be less than 3, and GFI, AGFI, NFI, TLI and CFI should be close to 1 while RMSEA should be less than 0.07 if the model is to be accepted (Reisinger & Mavondo, 2007).

All individual item reliabilities were above the minimum cut-off point of 0.5 (Reisinger & Mavondo, 2007) and composite reliabilities for all the constructs were above the minimum

cut-off point of 0.7. Significant at $p < 0.001$, all standardised factor loadings for all items were above the minimum cut-off point of 0.6 (Segars, 1997). All critical ratios for the items were sufficiently large ($W2$) and significant at $p < 0.001$ (Segars, 1997). All AVEs for the constructs were greater than the minimum cut-off point of 0.5 (Fornell & Larcker, 1981) as shown in Table 3.

5.3 Discriminant validity

AVEs and squared inter-construct correlations (SICs) were examined in order to evaluate discriminant validity. Table 2's results demonstrate the presence of discriminant validity. Comparable SICs were smaller than AVEs (Fornell & Larcker, 1981; Segars, 1997). Results of discriminant validity are shown in Table 4.

Table 4: Mean (M), standard deviation (SD), AVE and SICC

Construct	M	SD	PUOT	PEOU	VIUT	EDWE
Perceived usefulness (PUOT)	4.75	4.75	.631			
Perceived ease of use (PEOU)	4.98	4.98	.258	.652		
Voluntariness (VOU)	4.95	4.95	.158	.325	.334	.593
Entrepreneurship Performance (EDWE)	4.53	4.53	.298	.228	.214	.276

Note: Diagonal elements in bold represent AVEs

Source: Author (2023)

5.4 Testing research hypotheses

Structural equation modelling was conducted in AMOS V22 to test the structural relationships proposed in Figure 1 (H1-H3). The structural model displayed acceptable fit ($\chi^2/DF=1.991$; GFI-0.936; AGFI-0.907; NFI-0.944; TLI-0.929; CFI-0.951; RMSEA-0.047). Table 5 represents hypothesis testing results.

Table 5: Hypotheses testing

Hypothesis	Hypothesised Relationship	SRW	CR	Remark
H ₁	Perceived Usefulness → Women Entrepreneurship Performance	.305	17.85***	Supported
H ₂	Perceived ease of use → Women Entrepreneurship Performance	.287	12.041***	Supported
H ₃	Voluntariness in the use → Women Entrepreneurship Performance	.274	11.451***	Supported

Source: Author (2023)

Results in Table 5 show that perceived usefulness, perceived ease of use and voluntariness on the use of technology all have a direct and positive effect on women entrepreneurship digitalisation. Therefore, H₁-H₃ were supported. The results imply that entrepreneurship digitalisation (perceived usefulness, perceived ease of use and voluntariness in the use) has positive effect of entrepreneurship performance. Table 6 shows coefficients of moderated regression model.

Table 6: Coefficients of moderated regression model

Variable	Beta	t-statistic	p value
Entrepreneurship digitalisation	.482	3.031	.000
Age	.424	3.138	.000
Level of education	.397	2.234	.000
Entrepreneurship digitalisation x Age	.521	4.364	.000
Entrepreneurship digitalisation x Level of education	.523	4.029	.000

Source: Author (2023)

H₄ and H₅ were tested using moderated regression analysis. As for H₄ and H₅, coefficients for the interaction terms (Entrepreneurship digitalisation x Age and Entrepreneurship digitalisation x Level of education) were all significant (p<0.001). This suggests that both age and level of education moderate the effect of entrepreneurship digitalisation on women entrepreneurship performance. The results show that younger women entrepreneurs who are highly educated positively adopt digital technology. Thus, H₄ and H₅ were both supported.

6. DISCUSSION AND IMPLICATIONS

The findings of the study have theoretical, practical and future research implications.

6.1 Theoretical implications

Studies that have investigated the influence of entrepreneurship digitalisation on women entrepreneurship performance in an emerging economy like Zimbabwe are scarce. This study was conducted to enhance the understanding of the inclusion of digitalisation in women entrepreneurship businesses. The study sought to determine the effects of perceived usefulness of technology, perceived ease of use of technology and voluntary use of technology on women entrepreneurship performance.

The study established a significant positive relationship between perceived usefulness of digital technology and women entrepreneurship performance. Thus, improvement in digital technology results in improved women entrepreneurship performance. Results also imply that if digital technology is user friendly and easy to use women entrepreneurs will digitalise their entrepreneurial ventures. The study results corroborate earlier related studies that focused on factors which influence business performance (Ladzani, & Van Vuuren, 2002; Shakeel et al., 2020).

The foregoing findings show that perceived ease of use of digital technology has a positive influence in influencing women entrepreneurship performance. This translates to the fact that entrepreneurship digitalisation by women entrepreneurs depends on their perception with digital technology and this is supported by studies by (Chikazhe et al., 2023a; Majumdar & Pujari, 2022).

There is sufficient evidence from the study findings to suggest that voluntariness on the use of digital technology in influencing women entrepreneurship performance. Thus, women entrepreneurship performance was influenced by voluntariness on the use of

digital technology. The results add to previous related studies that focused on the effect of digitalisation on general business performance (Ali et al. 2023; Chikazhe et al., 2023b). Since all research hypotheses were supported, this suggests that entrepreneurship digitalisation is crucial for the performance of women entrepreneurship especially in emerging economies like Zimbabwe.

The study established that age and level of education plays a moderating role between entrepreneurship digitalisation and women entrepreneurship performance. This implies that age and level of education contributes to the adoption of digital technology as it was shown that young women entrepreneurs are willing to digitalise compared to older women. Also those women with either experience of the past or higher level of education be it informal or formal education are willing to adopt digital technology.

6.2 Practical implications

The study results indicate that there is need for embracing digital technology devices (cell phones, tablets) and link with customers within women entrepreneurship businesses. It is therefore encouraged that women entrepreneurs adopt digitalisation and communicate with customers so as to produce a wide range of customised products to suit customer needs. The adoption and implementation of digitalization allows increased administrative and managerial commitment within women entrepreneurs. Digitalised businesses can easily collaborate with customers and speed up communication and this also encourages versatile working. Through entrepreneurship digitalisation, customer feedback can be improved and this results in improved customer service, loyalty and satisfaction. The adoption of digital technology can increase commercial and technical information knowledge-sharing with customers which could see an increased business performance.

6.3 Future research implications

This study is one of the few that has the audacity to look at the impact of digitalization on entrepreneurship performance in a setting unlike anything found in Zimbabwe. One of Zimbabwe's provinces, Mashonaland West, was the site of the study. The findings' generalisability is hampered by this backdrop. As a result, further research of this kind ought to be carried out in the future in different regions of the globe.

References

- 1) Abbasianchavari, A., & Moritz, A. (2021). The impact of role models on entrepreneurial intentions and behaviour: a review of the literature. *Management Review Quarterly*, 71(9), 1-40. <https://doi.org/10.1007/s11301-019-00179-0>
- 2) Acharya, S., & Ganesan, P. (2019). Factors that affect students' intention and use of technology: an assessment of UTAUT2 in the context of YouTube video forwarding behaviour. *International Journal of Business and Emerging Markets*, 11(4), 348-367. <https://doi.org/10.1504/IJBEM.2019.105231>
- 3) Alene, E. T. (2020). Determinants that influence the performance of women entrepreneurs in micro and small enterprises in Ethiopia. *Journal of Innovation and Entrepreneurship*, 9(1), 1-20. <https://doi.org/10.1186/s13731-020-00132-6>

- 4) Alharahsheh, H. H., & Pius, A. (2020). A review of key paradigms: Positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, 2(3), 39-43. <https://doi.org/10.36348/gajhss.2020.v02i03.001>
- 5) Ali, M., Raza, S. A., Puah, C. H., & Mubarik, M. S. (2023). Customer acceptance toward Islamic personal financing in Pakistan. *Journal of Financial Services Marketing*, 28(2), 270-284. <https://doi.org/10.1057/s41264-022-00149-w>
- 6) Aliyu, A., Abdullah, A. H., Kaiwartya, O., Hussain Madni, S. H., Joda, U. M., Ado, A., & Tayyab, M. (2020). Mobile cloud computing: taxonomy and challenges. *Journal of Computer Networks and Communications*, 2020, 1-23. <https://doi.org/10.1155/2020/2547921>
- 7) Aliyu, S. M. (2013). An assessment of women entrepreneurship performance in Nigeria. *Malaysian Management Journal*, 17, 1-12. <https://doi.org/10.32890/mm>
- 8) Azman, N. H. N., & Zabri, M. Z. M. (2022). Sharī'ah-Compliant Fintech Usage among Microentrepreneurs in Malaysia: An Extension of UTAUT Model. *Journal of Islamic Monetary Economics and Finance*, 8(2), 305-324. <https://doi.org/10.21098/jimf.v8i2.1417>
- 9) Baabdullah, A. M., Alalwan, A. A., Rana, N. P., Kizgin, H., & Patil, P. (2019). Consumer use of mobile banking (M-Banking) in Saudi Arabia: Towards an integrated model. *International journal of information management*, 44, 38-52. <https://doi.org/10.1016/j.ijinfomgt.2018.09.002>
- 10) Chau, P. Y., & Hu, P. J. H. (2001). Information technology acceptance by individual professionals: A model comparison approach. *Decision sciences*, 32(4), 699-719. <https://doi.org/10.1111/j.1540-5915.2001.tb00978.x>
- 11) Cheng, E. W. (2019). Choosing between the theory of planned behaviour (TPB) and the technology acceptance model (TAM). *Educational Technology Research and Development*, 67, 21-37. <https://doi.org/10.1007/s11423-018-9598-6>
- 12) Chikazhe, L., Bhebhe, T., Nyagadza, B., Munyanyi, E., & Singizi, T. (2023a). The role of self-service technology and graduates' perceived job performance in assessing university service quality. *Quality Assurance in Education*, 31(2), 263-280. <https://doi.org/10.1108/QAE-03-2022-0080>
- 13) Chikazhe, L., Marere, R. P., Chavunduka, D., Chinofunga, S., Chifamba, O. & Kaviya M. (2023b). Promoting Service Quality and Organisational Performance through Customer Retention Strategies: The Moderating Role of ICT. *European Journal of Management Studies*. <https://doi.org/10.1108/EJMS-01-2023-0003>
- 14) Chitando, E., Chirongoma, S., & Nyakudya, M. (2023). Introducing a Radical African Indigenous Feminist Principle: Chihera in Zimbabwe. In *Chihera in Zimbabwe: A Radical African Feminist Principle* (pp. 1-31). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-12466-2_1
- 15) Corrêa, V. S., Brito, F. R. D. S., Lima, R. M. D., & Queiroz, M. M. (2022). Female entrepreneurship in emerging and developing countries: a systematic literature review. *International Journal of Gender and Entrepreneurship*, 14(3), 300-322. <https://doi.org/10.1108/IJGE-08-2021-0142>
- 16) Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340. <https://doi.org/10.2307/249008>
- 17) Etim, E., & Daramola, O. (2020). The informal sector and economic growth of South Africa and Nigeria: A comparative systematic review. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 134. <https://doi.org/10.3390/joitmc6040134>
- 18) Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. [doi/abs/10.1177/002224378101800313](https://doi.org/10.1177/002224378101800313)

- 19) Giones, F., & Brem, A. (2017). Digital technology entrepreneurship: A definition and research agenda. *Technology innovation management review*, 7(5). <https://ssrn.com/abstract=2984542>
- 20) Hastie, R. (2022). Schematic principles in human memory. *Social cognition*, 39-88.
- 21) Ingalagi, S. S., Nawaz, N., Rahiman, H. U., Hariharasudan, A., & Hundekar, V. (2021). Unveiling the crucial factors of women entrepreneurship in the 21st century. *Social Sciences*, 10(5), 153. <https://doi.org/10.3390/socsci10050153>
- 22) Kickul, J., Liao, J., Gundry, L., & Iakovleva, T. (2010). Firm resources, opportunity recognition, entrepreneurial orientation and performance: the case of Russian women-led family businesses. *International Journal of Entrepreneurship and Innovation Management*, 12(1), 52-69. <https://doi/abs/10.1504/IJEIM.2010.033167>
- 23) Kijsanayotin, B., Pannarunothai, S., & Speedie, S. M. (2009). Factors influencing health information technology adoption in Thailand's community health centers: Applying the UTAUT model. *International journal of medical informatics*, 78(6), 404-416. <https://doi.org/10.1016/j.ijmedinf.2008.12.005>
- 24) Kishore, S. K., & Sequeira, A. H. (2016). An empirical investigation on mobile banking service adoption in rural Karnataka. *Sage Open*, 6(1), 2158244016633731. <https://doi.org/10.1177/2158244016633731>
- 25) Kumar, M., Patel, A. K., Shah, A. V., Raval, J., Rajpara, N., Joshi, M., & Joshi, C. G. (2020). First proof of the capability of wastewater surveillance for COVID-19 in India through detection of genetic material of SARS-CoV-2. *Science of the Total Environment*, 746, 141326. <https://doi.org/10.1016/j.scitotenv.2020.141326>
- 26) Ladzani, W. M., & Van Vuuren, J. J. (2002). Entrepreneurship training for emerging SMEs in South Africa. *Journal of small business management*, 40(2), 154-161. <https://doi.org/10.1111/1540-627X.00047>
- 27) Le Dinh, T., Vu, M. C., & Ayayi, A. (2018). Towards a living lab for promoting the digital entrepreneurship process. *International Journal of Entrepreneurship*, 22(1), 1-17.
- 28) Lichy, J., Farquhar, J. D., & Kachour, M. (2021). Entrepreneurship via social networks—“connected woman” in Lebanon. *Qualitative Market Research: An International Journal*, 24(4), 426-448. <https://doi.org/10.1108/QMR-01-2020-0004>
- 29) Majumdar, S., & Pujari, V. (2022). Exploring usage of mobile banking apps in the UAE: a categorical regression analysis. *Journal of Financial Services Marketing*, 27(3), 177-189. <https://doi.org/10.1057/s41264-021-00112-1>
- 30) Mandongwe, L., & Jaravaza, D. C. (2020). Women entrepreneurial intentions in subsistence marketplaces: The role of entrepreneurial orientation and demographic profiles in Zimbabwe. *Cogent Business & Management*, 7(1), 1818365. <https://doi.org/10.1080/23311975.2020.1818365>
- 31) Mashapure, R., Nyagadza, B., Chikazhe, L., Mazuruse, G., & Hove, P. (2023). Women entrepreneurship development and sustainable rural livelihoods in Zimbabwe. *Arab Gulf Journal of Scientific Research*. <https://doi.org/10.1108/AGJSR-07-2022-0112>
- 32) Mashapure, R., Nyagadza, B., Chikazhe, L., Msipa, N., Ngorora, G. K. P., & Gwiza, A. (2022). Challenges hindering women entrepreneurship sustainability in rural livelihoods: Case of Manicaland province. *Cogent Social Sciences*, 8(1), 2132675. <https://doi.org/10.1080/23311886.2022.2132675>
- 33) Meressa, H. A. (2020). Growth of micro and small scale enterprises and its driving factors: Empirical evidence from entrepreneurs in emerging region of Ethiopia. *Journal of Innovation and Entrepreneurship*, 9, 1-22. <https://doi.org/10.1186/s13731-020-00121-9>

- 34) Mohsin, A. K. M., & Lei, H. (2020). Factor analysis for the development of women entrepreneurship in SMEs: an empirical evidence from Bangladesh. *David Publishing Company www. davidpublisher.com*, 19(1), 22-35.
https://www.mirdec.com/_files/ugd/f279ca_1564c94cae644a658a4cfc18a7b080.pdf#page=82
- 35) Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information systems research*, 2(3), 192-222.
<https://doi.org/10.1287/isre.2.3.192>
- 36) Moreno-Gavara, C., Jiménez-Zarco, A. I., & Alabi, S. A. (2019). Challenges and opportunities for women entrepreneurs. *Sustainable fashion: Empowering African women entrepreneurs in the fashion industry*, 115-145. http://dx.doi.org/10.1007/978-3-030-98966-8_10
- 37) Motwani, B., & Sharma, R. K. (2016). A study on the effect of enterprise resource planning (ERP) on people of an organization. *Journal of Technology Management for Growing Economies*, 7(1), 73-84.
<https://doi.org/10.15415/jtmge.2016.71004>
- 38) Mozumdar, L., Hagelaar, G., van der Velde, G., & Omta, S. W. F. (2020). Determinants of the business performance of women entrepreneurs in the developing world context. *J*, 3(2), 17.
<https://doi.org/10.3390/j3020017>
- 39) Mpofo, F. Y. (2021). A critical review of the taxation of the informal sector in Zimbabwe.
<https://orcid.org/0000-0002-6309-1697>
- 40) Myovella, G., Karacuka, M., & Haucap, J. (2020). Digitalization and economic growth: A comparative analysis of Sub-Saharan Africa and OECD economies. *Telecommunications Policy*, 44(2), 101856.
<https://doi.org/10.1016/j.telpol.2019.101856>
- 41) Nyaki, N. (2020). Influence of Women Empowerment Projects on Enhancemet of Food Security in Mbeere Sub-counties, Embu County, Kenya (Doctoral dissertation, University of Nairobi).
<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>
- 42) Nyaki, N. (2020). *Influence of Women Empowerment Projects on Enhancemet of Food Security in Mbeere Sub-counties, Embu County, Kenya* (Doctoral dissertation, University of Nairobi).
- 43) Opute, A. P., Kalu, K. I., Adeola, O., & Iwu, C. G. (2021). Steering sustainable economic growth: entrepreneurial ecosystem approach. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 7(2), 216-245. <https://doi.org/10.1177/23939575211024384>
- 44) Platin, N., & Ergun, H. S. (2017). The relationship between entrepreneurial orientation and performance; evidence from Turkish SMEs. *Business and management Studies*, 3(2), 78-89.
<https://doi.org/10.11114/bms.v3i2.2408>
- 45) Rahi, S., Khan, M.M. and Alghizzawi, M. (2021), "Extension of technology continuance theory (TCT) with task technology fit (TTF) in the context of Internet banking user continuance intention", *International Journal of Quality & Reliability Management*, Vol. 38 No. 4, pp. 986-1004.
<https://doi.org/10.1108/IJQRM-03-2020-0074>
- 46) Rafique, M. Z., Ab Rahman, M. N., Saibani, N., & Arsad, N. (2019). A systematic review of lean implementation approaches: a proposed technology combined lean implementation framework. *Total Quality Management & Business Excellence*, 30(3-4), 386-421.
<https://doi.org/10.1080/14783363.2017.1308818>
- 47) Reisinger, Y., & Mavondo, F. (2007). Structural equation modeling: Critical issues and new developments. *Journal of travel & tourism marketing*, 21(4), 41-71.
https://doi.org/10.1300/J073v21n04_05

- 48) Rosin, F., Forget, P., Lamouri, S., & Pellerin, R. (2020). Impacts of Industry 4.0 technologies on Lean principles. *International Journal of Production Research*, 58(6), 1644-1661. <https://doi.org/10.1080/00207543.2019.1672902>
- 49) Segar, J. L. (1997). Ontogeny of the arterial and cardiopulmonary baroreflex during fetal and postnatal life. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 273(2), R457-R471. doi.org/10.1152/ajpregu.1997.273.2.R457
- 50) Shakeel, M., Yaokuang, L., & Gohar, A. (2020). Identifying the entrepreneurial success factors and the performance of women-owned businesses in Pakistan: The moderating role of national culture. *Sage Open*, 10(2), 2158244020919520. <https://doi.org/10.1177/2158244020919520>
- 51) Venkatesh, V., & Zhang, X. (2010). Unified theory of acceptance and use of technology: US vs. China. *Journal of global information technology management*, 13(1), 5-27. <https://doi.org/10.1080/1097198X.2010.10856507>
- 52) Yasir, N., Mahmood, N., Mehmood, H. S., Babar, M., Irfan, M., & Liren, A. (2021). Impact of environmental, social values and the consideration of future consequences for the development of a sustainable entrepreneurial intention. *Sustainability*, 13(5), 2648. <https://doi.org/10.3390/su13052648>