UNIVERSITY OF MEDIA, ARTS AND COMMUNICATION (UniMAC)

INSTITUTE OF JOURNALISM

THE DIGITAL DIVIDE FACED BY GHANAIAN FEMALE ENTREPRENEURS AND THE COPING MECHANISMS

RUTH NAA YEMORKOR ANNAN

DEPARTMENT OF PUBLIC RELATIONS

DECEMBER 2025

UNIVERSITY OF MEDIA, ARTS AND COMMUNICATION (UniMAC)

INSTITUTE OF JOURNALISM

THE DIGITAL DIVIDE FACED BY GHANAIAN FEMALE ENTREPRENEURS AND THE COPING MECHANISMS

BY

RUTH NAA YEMORKOR ANNAN

MAPRM24044

DISSERTATION SUBMITTED TO THE INSTITUTE OF JOURNALISM, UNIVERSITY OF MEDIA, ARTS AND COMMUNICATION (UniMAC), IN PARTIAL FULFILMENT FOR THE AWARD OF MASTER OF ARTS IN PUBLIC RELATIONS WITH MARKETING

DECEMBER 2025

DECLARATION

Candidate's Declaration

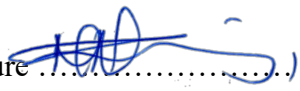
I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature  Date: 3rd December, 2025

Ruth Naa Yemorkor Annan

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Media, Arts and Communication.

Supervisor's Signature  Date 8/12/2025

Dr Noel Nutsugah

DEDICATION

To my family

ACKNOWLEDGEMENT

I would like to express my profound gratitude to my supervisor, Dr. Noel Nutsugah of the Department of Public Relations, University of Media, Arts and Communication, for his guidance and support throughout this journey. I am grateful.

I am also grateful to all the lecturers of the Department. I register my heartfelt gratitude to Mr Rexford Boateng Gyasi for all the support and encouragement, and to my entire family for the emotional support.

ABSTRACT

This study investigates the digital divide faced by Ghanaian female entrepreneurs and the coping mechanisms they adopt to navigate digital challenges. Despite Africa being the only continent where females dominate the entrepreneurial space, Ghanaian female entrepreneurs continue to face significant barriers in leveraging digital technologies for business growth. Grounded in the Resource-Based Theory (RBT), this thesis set out to explore the nature of the digital, the effect on performance and the coping mechanisms adopted to mitigate the challenges. Using a qualitative approach within a constructivist paradigm, the study engaged 30 female entrepreneurs operating in Accra. Data was collected through questionnaires that contained a balance of open-ended and closed-ended questions. Data was administered in person and allowed for interpretation and clarification. The findings reveal that while many entrepreneurs have access to digital devices, disparities in digital literacy and digital technology use persist. This digital divide manifests in reduced market reach, a smaller customer base, and limited sales. Entrepreneurs cope through family and friends support networks, support staff, and alternative means of marketing. The study contributes to the limited literature on gendered digital divide in entrepreneurship, offering insights into the barriers that hinder female-led ventures in Ghana. It recommends targeted digital literacy programmes, inclusive ICT policies, and community-based training hubs to bridge the divide. Ultimately, empowering female entrepreneurs with training resources is essential for fostering inclusive economic development and gender equity in Ghana.

TABLE OF CONTENTS

Contents

LIST OF TABLES

CHAPTER ONE

INTRODUCTION

1.0 Chapter Introduction

This chapter provides the background and context of the entire thesis. It also details the problem the study sought to address, the research objectives and questions underpinning the thesis. The chapter also discusses the scope and significance of such a study, as well as the organisation of the thesis.

1.1 Background of the study

There is a long-standing tradition of females engaging in entrepreneurial activity in Africa, specifically in the Sub-Saharan Region. The World Bank Report (2019) reveals Africa as the only continent where the domain is dominated by females. Market trading has long been regarded women's work in Western Africa, and even though this tradition preceded colonization, Chamlee-Wright (1997) argues that the practice became entrenched in the colonial period. To place this in its socio-historical context, it is argued that while men were mostly away on their adventures (i.e. farming, hunting, fishing, long-distance trading, etc.), the women in the households set up markets to sell whatever the men brought from their journeys. That became their occupation and a means to pass time while they waited for their breadwinners. That is how the local markets became female-populated. Chamlee-Wright (1997) adds that since western education was primarily offered to men, it gave them access to more formal jobs, leaving informal market trading for women. Today, the main markets, especially in Ghana, continue to be dominated by women who have diversified their trading to include clothing, kitchenware, furniture, etc. while dominating in the staple food market. In their study on the motivation of informal entrepreneurs in Koforidua, Adom and Williams

(2012) contend that women participate in informal entrepreneurial activities to complement family income. However, there is a growing number of female entrepreneurs whose businesses serve as main source of income.

Ghanaian (female) entrepreneurs have witnessed a proliferation of digital technologies, with significant influence on their markets, in the past few decades. Unlimited access and extensive use of the internet and digital apps are at the forefront of this digital transformation, seamlessly bringing stakeholders together. Naatu et al. (2024) note that perceived ease of use and perceived usefulness predict entrepreneurs' intention to adopt digital technologies. However, inadequate digital literacy initiatives for female entrepreneurs have created a digital divide:
"[A] gap between people who can easily use and access technology, and those who cannot" (West, 2011). Ohemeng and Adarkwah (2014) argue that problems associated with this gap are more serious in developing countries including Ghana. They report Fink and Kenny's four interpretations of the digital divide which are: 1) a gap in ICT access which is "measured by, for instance, the number and spread of telephones and web-enabled computers"; 2) a gap in the ability to use ICT which is measured by skills set; 3) a gap in actual use which is measured by the use of ICT for various purposes, and 4) "[A] gap in the impact of use, measured by financial and economic returns." (pp. 300-301).

While this phenomenon of digital inequality is glaringly noticeable, it has attracted little scholarly attention within the Ghanaian entrepreneurial space. The study seeks to explore the digital divide among Ghanaian female entrepreneurs, the perceived challenges it poses, and the coping mechanism adopted by the underprivileged.

1.2 Problem Statement

The literature on female entrepreneurship in Ghana highlights certain factors that mediate the performance of female entrepreneurs such as family life (Adom et al., 2018), access to capital

(Abor & Biepke, 2006), culture and religion (Agyei, 2018; Reid et al., 2015). One relatively new factor that potentially impacts performance of female entrepreneurs, especially in this era of digital economies, is a digital divide that results from either lack of access, skills and/or literacy (Cohron, 2015). It is the argument of this paper, following the arguments of Cohron, that conversations about digital divide have moved from divide in access, first order of digital divide, to a divide in skills and literacy, second order of digital divide (Jin & Cheong, 2008). Even though it has been established how digital divide, whether because of access or skills, leads to income inequality in sub-Saharan African countries (Ndoya & Asongu, 2024), there continues to be a dearth of scientific research on the digital divide of female entrepreneurs and the coping mechanism adopted in the Ghanaian Entrepreneurial Space. This research gap is reiterated by the conclusion of Visvizi et al. (2023), in their Guest editorial on *Gender entrepreneurship and the digital divide: a global perspective,* when they noted: *"relatively little has been written about the gendered dimension of the digital divide"* (p229).

Considering how digitalisation is gaining prominence in Ghana, especially in a sector dominated by women (entrepreneurship), it is surprising that studies have not been conducted to examine how gender mediates the digital divide. My search clearly showed knowledge gaps, with most studies on Ghanaian female entrepreneurs (Adom et al., 2018; Agyei, 2018) focusing on factors that mediate performance and not necessarily addressing digital use. The few studies which have explored digitalisation and female entrepreneurs (Naatu et al., 2024) focused on factors which influenced the adoption of digital technology and did not examine how digitalisation, for instance, mediates performance. This study seeks to occupy the identified knowledge gaps by exploring the digital divide among female entrepreneurs and their coping strategies.

1.3 Research Objectives

The general objective of this study is to interrogate the digital divide among female entrepreneurs in Ghana and their coping mechanisms. Out of this general objective, the following specific objectives are derived. The study seeks to:

1. Measure the extent of the digital divide among female entrepreneurs in a Ghanaian community
2. Observe the impact of the digital divide on entrepreneurial performance.
3. Interrogate the coping mechanisms adopted by entrepreneurs to curb perceived challenges of digital divide.

1.4 Research Questions

This study will answer the following research questions:

1. What is the extent of the digital divide among Ghanaian female entrepreneurs?
2. How does the digital divide affect the performance of female entrepreneurs?
3. What coping mechanisms are adopted to curb potential challenges?

1.5 Scope of the Study

This study focuses on the digital divide faced by Ghanaian female entrepreneurs and their coping mechanisms. The study applies the Resource based Theory, to understand the female digital divide and the coping mechanisms analysing data from 30 female entrepreneurs who operate businesses in Accra.

1.6 Significance of Study

This study is important and has implications for theory and practice. As established by the literature review and statement of problem, the gendered perspective of the digital divide in entrepreneurship lacks sufficient literature and this study will be a major contribution to knowledge. With practice, the challenges faced by female entrepreneurs in their adoption of

digital technology, the impact of the digital divide on the female entrepreneurs and their coping mechanisms will offer evidence for policy interventions and digital training.

1.7 Organisation of the Study

The study has five (5) chapters. Chapter one traces the background of the study, problem statement, objectives/questions as well as scope, significance and organisation of the study. Chapter two presents a review of literature and theory. Chapter three discusses the methods used for the study. The fourth chapter details the findings, and the study ends with conclusion in Chapter five.

1.8 Chapter Summary

This introductory chapter generally provided a background to the study. It discussed entrepreneurship and the historical role of Ghanaian females; the chapter also discussed the concept of digital divide. I then established a niche and proposed three research questions that will help solve the problem. Also, this chapter contains the scope and significance of the study, as well as the organisation of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of related literature, as well as a theoretical framework that underpins this study. The empirical review centres on thematic issues related to the current study, including digitalisation and digital divide, female entrepreneurship and the interplay between digital divide and female entrepreneurship, challenges of gendered digital divide and coping mechanisms.

2.1 Digitalisation and Digital Divide

Digitalisation defies a single definition, but the plethora of definitions acknowledges the use of information communication technologies in some domains of life. One such definition is by Brennen and Kreiss (2016) who defined digitalisation as a social process of appropriating digital communication infrastructure such as the internet to reorganise and enhance aspects of social life. The emergence and growth of digital technologies and increased internet connectivity have contributed to digitalisation across societies. While digitalisation continues to influence several sectors like economy, business, health, education and communication, there are people who either lack access or skills to digital technologies, resulting to digital illiteracy. It is this gap or inequality between those with access and digital skills, and those who lack access and/or skills that is termed *digital divide*.

Pierce (2018) traced the origin of the term *digital divide* to the 1970s but acknowledged that the term became popular after it was published in a 1995 US National Telecommunications and Information Administration (NTIA) report. In defining digital divide, Cullen (2001) reiterated the gap between those who are unable to access and effectively use ICT to access the Internet and the World Wide Web and those who have access and the skill set. She adds that, "[D]igital

divide has become a convenient metaphor to describe the perceived disadvantage of those who either are unable or do not choose to make use of these technologies in their daily life" (Cullen, 2001, p.311). In their book titled The Digital Divide, Ragnedda and Muschert (2013) posited that digital divide is a stratification in the access and use of the Internet. They noted, however, that conceptualising digital divide as just inequality in access and use was simplistic as these gaps translate into social inequalities. They further added that socio-economic factors like income, education and gender affect digital access and use.

2.2 Digital Access and Skills

Two main factors are widely discussed in the literature as contributing to digital divide, namely lack of access and lack of skills. It is the argument of this thesis, drawing from the insights from Cullen (2001), that digital divide may also result from people who choose not to use digital technologies.

Regarded as the first phase of the digital stratification, access (or lack of access) to digital resources and internet is considered a "[U]niversal issue and of major concern to many policy makers and governments" (Radovanić, 2013). As a result, societies have invested in ICT access and internet connectivity. The issue of access is profound in underdeveloped or developing countries, compared to advanced countries. In Ghana, for instance, disparity in access is profound if one compares urban communities with rural communities (Ofosu-Asare, 2024). Researchers have cited unreliable or no electricity, poor internet connectivity and lack of ICT tools as the main challenges facing rural communities in Ghana (Boateng et. al, 2018; OfosuAsare, 2024), and efforts by government include the distribution of ICT equipment like laptops to students, through policies like *One-student-One-laptop*, *Ghana Smart Schools Project*, etc.

Digital skill (or lack of it), together with related terms like digital (il)literacy and (lack of) proficiency, is another factor that creates digital inequality. Digital skills refer to the knowledge

and attitudes required for one to be digitally competent (Leahy & Wilson, 2014). Leahy and Wilson further explain digital competence to include knowing the basic use of a computer, the use of Internet, the use of cloud services and World Wide Web services, computer security and privacy, and having a 'digital lifestyle' (p. 180). Digital divide that results from lack of skills is conceptualised as a second-level digital divide (van Deursen & van Dijk, 2009; 2014). This concept results from lack of knowledge on handling ICT tools or surfing the internet. The issue of how to measure digital skills and the level of competence one needs to be considered a digital literate is problematic. van Deursen and van Dijk (2009) discuss a framework for digital skills and explains four types of skills: operational skills (including ability to operate a browser, use search engines and fill online forms); formal skills (ability to navigate the internet and maintain a sense of location while doing that, especially across multiple websites); information skills (being able to locate information by defining search queries and evaluating information), and finally, strategic skills (the ability to take advantage of the internet to reach a goal and to reap the benefits of the goal). While this offers some form of categorisation, there are no clear-cut boundaries between the classes. Other classification of digital skills and competence include levels such as basic, intermediate, advanced and expert (ElSayary, 2023; Zhao et al., 2021)

Ayisi et al. (2024) and Kwaah et al. (2022) conducted studies on digital literacies in Ghana and the mediating factors that affect digital skills. The former surveyed senior high students in Ghana and established that even though 8 out of 10 students had access to digital devices (i.e. phones, laptops and tablets), it did not directly translate into enhanced digital skills: the percentage of students who had access was significantly higher than those who could perform complex tasks with the digital devices. Kwaah et al. also investigated the digital skills of preservice teachers across 10 public training colleges in Ghana. The study, which sought to investigate how participants accessed online teaching materials during the COVID period, revealed high levels of stress for participants who were digital illiterates and had to resort to

friends and family to help them cope. With these clear challenges in digital skills, policy interventions may include incorporating ICT education in school curricular at different levels of education.

Arbeláez-Rendón et al. (2023) explored the influence digital divide has on the digital economy of Columbia. The study, which was premised on the disparity in the growth of digital ventures and the availability of people with the required skill set, was situated within Hekkert's Entrepreneurial Motor Framework while applying Jay Forrester's System Dynamics as basis for creating simulations. They revealed that "Digital divide can affect open innovation processes. If an individual does not have access to ICT related technologies, they may not be able to participate fully in open innovation processes that rely on digital platforms and tools" (p9). This finding is reiterated by Best et al. (2024) when they found that female entrepreneurs in the Caribbean are able to reach international markets from their remote islands through innovative digital apps. The resulting effects were *increased sustainability, positive outlook on the future (optimism), empowerment and resilience*.

Concerning how digital divide can be overcome, Arbeláez-Rendón et al. (2023) recommended ICT training and government programmes as a means of reducing digital divide and ensuring inclusivity. In a similar study, Drydakis (2024) examined the gender digital divide among immigrant entrepreneurs in UK, Cyprus and Greece and the impact of digital technologies on their business performance and empowerment. Like Arbeláez-Rendón et al., the study highlighted the need for targeted training interventions to reduce disparities.

2.3 Female Entrepreneurship

Entrepreneurship is highly regarded as a gendered occupation or sector, with a history of how women have dominated this field. Many scholars have sought to define entrepreneurship and the entrepreneur from diverse perspectives, and while the literature records multiple

definitions, the ‘entrepreneur’ tag is given to the founder of a new business (Gartner, 1985), and entrepreneurship is used to define activities such as creation, opportunity pursuit and profitseeking (Prince et al., 2021). Two main viewpoints of the concept emerged in Gartner’s (1990) paper, namely characteristics of entrepreneurship (focus on the entrepreneur, innovation, growth and uniqueness) and outcome of entrepreneurship (focus on value creation, for profit and owner-manager). Following the first academic paper on female entrepreneurship by Eleanor Schwartz in 1976, research on women-owned businesses has gained momentum, leading to the field of female entrepreneurship.

McAdam (2013) conceptualised female entrepreneurship as businesses created and managed by women. While geographical differences exist in what constitutes female-owned businesses, McAdam argued that the UK considers businesses in which women have a majority share as women-owned, just as US regards businesses which have a female principal owner, or more than 50% female shareholders as women-owned. Africa serves as the leading continent when it comes to female entrepreneurship. The World Bank Report (2019) revealed Africa as the only continent where the entrepreneurship field is dominated by females, making research on female entrepreneurship even more relevant.

Bruni et al. (as cited in McAdam, 2013) categorised female entrepreneurs into seven types, based mainly on their motivation. First, they identified a class of young females who pursue entrepreneurial activities due to unemployment. Second, some females, termed ‘successoriented’, see entrepreneurship as a long-term career strategy. The third group of females, usually without children, see entrepreneurship as a means to achieve professional fulfilment or a means to psychologically overcome challenges faced at previous workplaces. The fourth group, according to Bruni et al., are called the ‘dualists’ and refer to females who seek to achieve flexibility by combining family and work responsibilities. The fifth group are the ‘return workers’ who have quit their jobs to take care of the home and seek to gain some

economic benefits. The sixth class of entrepreneurs are termed the 'traditionalists' and come from a family of entrepreneurs. To them, owning a business is a family tradition that needs to be kept alive. Finally, Bruni et al. identified a class of female entrepreneurs who are motivated to challenge antagonistic cultures that suppress women; for them, they set up businesses to promote women. Adom (2015) adds that in developing countries (like Ghana), "women engaged in entrepreneurial activity are driven by pure survival; that is to say out of necessity rather than opportunity factors" (p. 6).

Other studies have looked at the intersection between gender and entrepreneurship in Ghana. Mensah (2023) examined the trends, opportunities and challenges in Ghana's entrepreneurial system, focusing on gender. The study identified gender inequality in Ghana's entrepreneurial ecosystem but noted the government's role in developing women's ventures in Ghana through policies and tax reforms. One such policy, she revealed, is the National Local Economic Development (LED) Policy, which was initiated by the Ministry of Local Government and Rural Development to "nurture and mentor youth and women entrepreneurs…" (Mensah, 2023, p. 15). The study observed that female entrepreneurs were more inclined towards textiles and garments, hence government policies targeted such sectors.

2.4 Digitalisation and Entrepreneurship

The impact of digitalisation on entrepreneurship, just like other sectors, cannot be overemphasised, with the proliferation of digitalised market platforms that make buying and selling possible with access to the internet. The rise of the internet undoubtedly has brought some opportunities for entrepreneurs in Africa and Ghana, to be specific.

Friederici et al. (2020) conducted in-depth interviews of entrepreneurs from 11 African cities to ascertain the state of African digital markets. Participants generally alluded to the newness of digital entrepreneurship as an economic practice in Africa, tracing its beginning to late 1990s and early 2000s when mobiles became increasingly available. The study reported that digital

entrepreneurs, while acknowledging the availability and wide use of mobile phones, saw a vast difference between the number of people with access to phones and those who engage in digital marketing. Also, patronage of products on digital markets was seen to be high in urban cities. Friederici (2019), in an earlier study, maintained that the use of digital technologies in entrepreneurship is a game-changer and a powerful driver of local innovation in sub-Saharan Africa.

Asiedu et al. (2018) examined the role of mobile technology and related platforms in supporting entrepreneurial activities in rural Ghana. Whereas their study shares a similar geographical context with the current study, it differs in scope and methodology. For methodology, the study sampled five 'micro-entrepreneurs' from the Kwahu South District in Eastern Ghana and used semi-structured interviews as data collection instruments. Also, owners of small businesses with fewer than five employees were considered for the study. In terms of scope, the study focused on factors that influenced the adoption of technology, the kind of technology and digital applications used, and challenges in the use of technology for business. Asiedu et al. found that ease of use, ease of acquisition and competitive advantage were the main reasons why rural-based entrepreneurs adopted mobile technology. Smartphones and phones with lasting batteries were preferred by the rural entrepreneurs as they cited unstable electricity as a reason. It was also revealed that Social Networking Platforms like WhatsApp and Facebook were commonly used for business processes, such as taking orders, communication and supply. The major challenges faced were network issues, airtime cost and unstable electricity to power phone batteries.

In his study on smartphone usage patterns in Ghana, Okae (2018) conducted a survey to investigate the adoption and use of smartphones among a cross-section of income groups in Ghana. The study was premised on the argument that there is a widespread use of smartphone regardless of income and age groups and people regard the use of smartphone now as a norm

and not an exception (in fact, not owning or using a smartphone in Ghana now appears to be an exception, with people tagging traditional cellular phones as 'yam' as was captured in a popular Tigo advert 'drop that yam'). Okae found that the proliferation of smartphones in Ghanaian markets coincided with the increase in social networking applications like Facebook, WhatsApp, Instagram and Twitter, and for users of these smartphones, the type of phone that supports such applications and other software is a must-have. Interestingly, the surge in smartphone use, he observed, was not affected by educational background, as even the least educated were in demand of such phones.

Similarly, Naatu et al. (2024) explored factors influencing the adoption and use of digital technologies by Ghanaian entrepreneurs. Using structural equation modelling, the study revealed that entrepreneurs develop confidence in their digital abilities when there is a *promotion of ease of use.* That is, when there is no perceived difficulty in the use of digital technologies, it fosters a positive attitude. The study recommended that app developers adopt user-friendly designs to diminish perceived barriers in technology use.

Providing a gendered perspective on digitalisation and entrepreneurship, Best et al. (2024) explored how female entrepreneurs in the Caribbean use digital technologies to transform their businesses. Situated within post-colonial theory, 30 business owners, from three countries, namely Trinidad and Tobago, Barbados and Jamaica, were interviewed on their entrepreneurial activities as females and the role of digital technology in their daily operations. The study found five thematic areas that encapsulate the impact of digitalisation, namely Sustainability, Hope, Empowerment, Resilience and Optimism (SHERO). With sustainability, the female entrepreneurs recounted how, despite the limited markets and clients on the islands, they leveraged digital platforms to reach people in international markets. The study also reported how female entrepreneurs are hopeful and optimistic about the opportunities provided by digitalisation, amidst conventional limitations of females in business. Some entrepreneurs

reported how social media has empowered them to become entrepreneurs, because certain barriers that hindered females are lowered by digital technologies.

2.5 Gendered Digital Divide: challenges and coping mechanisms

Delle (2022) applied ethnographic methodologies to investigate the entrepreneurial experiences of female entrepreneurs in Accra. Spanning a four-year period, the study set out to find the cultural, social and familial factors that either enable or hinder tech entrepreneurship, and the gendered challenges associated with females who are involved in digital entrepreneurship. It is worth noting that the study, unlike the current study, was limited to female tech entrepreneurs. Findings from the 21 entrepreneurs show that religious and social mores shape the expectations and actions of female entrepreneurs as they navigate motherhood expectations. The study observed that females are faced with navigating infrastructural challenges and 'the idiosyncratic digital landscape', leading to calls for gender-conscious efforts to help address the problems faced by female entrepreneurs.

Khoo et al. (2024) conducted a study on the opportunities and challenges of digital competencies faced by female entrepreneurs in the tourism sector in Latin America. Semistructured interviews were conducted with 33 female entrepreneurs from Mexico and Ecuador to determine, among other things, the challenges they faced. Applying thematic analysis to the responses, Khoo et al. found that low education levels, lack of experience in using digital technology, fear and lack of confidence contributed to low digital competencies of women entrepreneurs. Some of these women resorted to family members and support staff for assistance in using digital technologies for business. Whereas the research setting differs from the current research site in terms of socio-cultural factors, their findings offer insight on some general challenges associated with the digital divide.

Faugoo and Onaga (2022) explored ways of overcoming the gendered digital divide and the associated challenges facing female entrepreneurs. Their study highlighted the need for training

and education opportunities for female entrepreneurs. Specifically, they argued that training should focus on digital skills that can lead to transformation in business. Also, digital literacy skills were highlighted as a key area for training courses. Providing measures to check cyberstalking and the development of emotional intelligence were also considered as ways to overcome the divide.

2.6 Theoretical Framework

The proposed study seeks to apply Resource-Based Theory (RBT). The main assumptions of this theory are that: capabilities and resources provide bases for different organisations (entities) to compete; performance differences thus can be attributed to resource (un)availability. A resource, as defined by Wernfelt, is "anything that could be thought of as a strength" to a person or group (Miles, 2012, p. 217). In their content-analytical comparison of how researchers and entrepreneurs view resources, Kellermanns et al. (2016, p.38) note:

> [B]oth defined resources in terms of human, financial, physical, and relationship capital and defined these assets as a necessary, but not sufficient condition for organisational advantages. Both researchers' and entrepreneurs' conceptualisations further suggest that it may not be resources themselves, but the leverage of such resources, that is important for organisational advantages (indicated by the emphasis both groups place on the dimension "creation")

In the context of the proposed study, digital technology can be conceptualised as a resource that potentially affects the performance of female entrepreneurs. The gendered digital divide among Ghanaian entrepreneurs will be measured taking into consideration digital abilities and digital use as a strength (resource) and digital illiteracy and lack of use as a lacking resource.

The effect of the latter will be assessed, and how entrepreneurs cope with the associated challenges will be measured.

The applicability of the resource-based view or theory to entrepreneurial studies is well documented in the literature. Kellermanns et al. (2016), for instance, note "RBV is being leveraged with greater frequency in entrepreneurship and that it is becoming increasingly influential" (p.27).

2.7 Chapter Summary

This chapter has presented a review of related literature on the digital divide and female entrepreneurship. The review covered studies on digitalisation, digital access and digital skills as factors of the digital divide, the interface between digitalisation and entrepreneurship, female entrepreneurship and some challenges posed by the gendered digital divide. While the review included studies from Ghana and beyond, the dearth of literature on the digital divide faced by Ghanaian female entrepreneurs was profound. The chapter also discussed the Resource-based Theory, which underpins the study.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter outlines the methods underpinning this research. There is a discussion of the research paradigm, approach and design, data source and sampling procedure. The chapter ends with a discussion on ethical considerations.

3.1 Research Paradigm

This study adopts the constructivist research paradigm, which is widely regarded as appropriate for qualitative inquiries that seek to understand how individuals construct meanings from experiences. The constructivist paradigm asserts that reality is not fixed or objective, but rather socially constructed, context-bound, and multiple in nature (Guba & Lincoln, 2005). This philosophical worldview focuses on interpreting the meanings people assign to phenomena and emphasises understanding human experience from the perspective of those experiencing it.

The constructivist paradigm rests on four core assumptions: ontological, epistemological, axiological, and methodological (Creswell & Poth, 2018). These assumptions inform the approach to knowledge generation and serve as the foundation for the qualitative orientation of this study. The ontological stance of constructivism posits that there are multiple realities or truths, which are co-constructed by individuals based on their personal experiences, social interactions, and cultural backgrounds (Guba & Lincoln, 2005) In the case of this research, different entrepreneurs may perceive and use the internet for different reasons and different ways with regard to their business. With epistemology, knowledge is co-created between the researcher and the participants. This perspective implies that the researcher cannot remain distant or detached but must instead develop rapport and trust to enable participants to share their authentic views (Schwandt, 2000). With axiological assumptions, constructivist inquiry acknowledges the inevitability of researcher bias and values in the research process. Unlike

positivist paradigms that strive for neutrality, constructivism holds that values are not only present but may enrich the interpretation of data (Creswell & Poth, 2018).

Finally, constructivist research is characterised by inductive, emergent, and flexible methodological approaches, allowing the researcher to respond to the data as it unfolds rather than testing predetermined hypotheses. With axiological assumptions, constructivist inquiry acknowledges the inevitability of researcher bias and values in the research process.

3.2 Research Approach

The study is situated within the qualitative framework. According to Creswell (2014), research that seeks to explore and understand the meanings that people ascribe to a human phenomenon is qualitative. The current study, which is explorative in nature, aligns with qualitative research. Creswell (2007) notes that qualitative researchers working within the constructivist paradigm aim to "develop a complex, holistic picture, analyse words, report detailed views of informants, and conduct the study in a natural setting" (p. 47). Lichtman (2006) also avers that a qualitative approach to research highlights the process of collecting, organising, and interpreting data in natural or social settings. According to Lichtman, the main purpose of this research approach is to provide a detailed description and understanding of human phenomena and human experiences, as against establishing statistical relationships between variables (quantitative).

3.3 Research Design

A research design refers to the strategy for the collection, measurement and analysis of data that enables a researcher to integrate the various components of a study to address an identified research problem (Labaree, 2009). As indicated in the previous section, this study adopted the qualitative research approach to analyse the digital divide of female entrepreneurs and their coping mechanisms. Also, the analysis of the phenomenon was descriptive, with no

statisticsbased generalisations. I sought to discover and describe the patterns in the sampled data.

Qualitative research focuses on how individuals construct their experiences. According to Guba (1990), in qualitative research, multiple-constructed realities abound, and time and context-free generalisations are neither desirable nor possible.

There exist several research designs in qualitative research, such as ethnography, phenomenology, grounded theory and case study. This study, specifically, is situated within the case study research design, which is explained by Creswell (2014, p.43) as "a design of inquiry found in many fields, especially evaluation, in which the researcher develops an in-depth analysis of a case, often a programme, event, activity, process…Cases are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over a sustained period of time." The phenomenon being investigated was digital divide and this was focused on female entrepreneurs Accra to observe patterns, without any attempts to establish correlations or make general generalisations.

3.4 Research Context

Accra is the capital city of Ghana, with a population of over 5.4million people in the Greater Accra region. Accra serves as Ghana's administrative, economic and cultural hub. Makola market is one of the oldest and renowned marketplaces in Accra, established in 1924, located in Accra Central. Lapaz market is one of the new markets in Accra, located on George Walker Bush Highway, known for its vibrant night trading, called the night market, because traders often trade at night, targeting workers and individuals who have closed from work or who do not have time to shop during the day.

3.5 Sampling Size and Strategies

30 female entrepreneurs were sampled for the study. The study adopted purposive and snowball sampling techniques. Purposive sampling was useful since only female entrepreneurs in Accra were considered for the study. Frost (2011) posits that, in purposive sampling, the characteristics of the population serve as a basis of selection. The use of snowballing became necessary when the researcher needed the assistance of some entrepreneurs to locate other potential participants for the study. These sampling strategies constitute non-probability sampling since the participants are not randomly selected nor given equal chances of selection. According to Wilmot (2005, p. 3), "qualitative research uses non-probability sampling as it does not aim to produce a statistically representative sample or draw statistical inference.

From the two sampling strategies, 30 female entrepreneurs were identified and used for the study. The choice of 30 was based on data saturation because the initial target was 50. Data saturation refers to the point in data analysis when there is redundancy, as no new information can be identified (Faulkner & Trotter, 2017). Saturation is a signal for the discontinuation of data collection and analysis in qualitative research (Saunders *et al.*, 2018).

3.6 Data Collection

Questionnaires were used to collect data from respondents. Although questionnaires originated as tools for quantitative studies, their use in qualitative studies is discussed in the literature (Grung et al., 2022). When questionnaires are used qualitatively, open-ended questions are included to measure participants' opinions. As such, the questions comprised open-ended questions and a few closed-ended questions to enable different forms of responses. Data was collected from 30 female entrepreneurs who operate their businesses in Makola, Lapaz and Awoshie. Data collection was done mainly through the in-person administration of questionnaires (which allowed for translation of questions for those who required so, and

provision of clarifications when needed). However, some respondents could not be reached due to scheduling issues and requested that questions be sent to them online through Google Forms. Table 1 provides the sociodemographic information of the 30 respondents, capturing their educational background, age range and their access to digital devices.

3.7 Ethical Considerations

Since the study involved human participants, key ethical concerns included informed consent and confidentiality. The first page of the questionnaire required confirmation from each entrepreneur to confirm their willingness to freely participate in the study. Before questions were asked of the participants, they had to tick 'yes' to the question: Do you give consent to participate in this study?

The second key ethical consideration for this study was protecting the privacy of respondents through anonymity. To achieve this, pseudonyms/codes were adopted for each respondent. 'Fent', which represents 'female entrepreneur', was used together with numbers 1 to 30 as codes for each of the 30 female entrepreneurs. These are in line with research practices and coding methods.

3.8 Chapter Summary

In this chapter, I discussed the methods used in this study. The chapter first introduced the research design, which is a qualitative case study. Also discussed in this chapter are the research approach and philosophical assumptions, data collection, sampling size and techniques, and some ethical considerations.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This chapter presents the results and discussion of the findings in relation to the three research questions. The chapter is divided into three main sections: the first entails findings and analysis pertaining to research question one which sought to investigate the extent of the digital divide among female entrepreneurs in Ghana; the second section presents findings and discussion of the second research question which was concerned with the effect of digital divide on performance (and with it how digital use impacts business); the final section discusses some coping mechanisms and measures adopted by entrepreneurs who may be affected by the digital divide. I begin with a description of respondents' demographics.

4.1 Demographics of Respondents

A total of 30 entrepreneurs took part in this study. The first criterion for selection was that the respondent must be a Ghanaian female entrepreneur. The 30 respondents were sampled from different age groups, educational backgrounds and types of businesses. The table below presents a pictorial view of the sociodemographic characteristics of all 30 respondents. In accordance with anonymity principles (discussed in Chapter Three), pseudonyms (Fent 1 – 30) are used instead of their names. Also, specific names of their shops are not used; rather, a generic type like Hair Salon or Cosmetics is preferred.

Table 1: Sociodemographic Characteristics of Respondents

Pseudonym	Age Group	Education	Business	Business Type	Access to any digital device
Fent1	18-29	Tertiary	Gifts Curation	S. E	Yes
Fent2	18-29	Tertiary	Hair Business/Sales	M. E	Yes
Fent3	18-29	Tertiary	Bags and Wedding Veils	M. E	Yes
Fent4	18-29	Basic	Cosmetics	M. E	Yes
Fent5	18-29	Tertiary	Hair Accessories and Event Deco	M. E	Yes
Fent6	30-40	Tertiary	Importation	M. E	Yes
Fent7	30-40	Tertiary	Beadwork and Jewellery	M. E	Yes
Fent8	18-29	Tertiary	Importation	M. E	Yes
Fent9	18-29	Basic	Perfumery	M. E	Yes
Fent10	18-19	Tertiary	Buying and selling	S. E	Yes
Fent11	30-40	Tertiary	Fashion Designing	M. E	Yes
Fent12	30-40	Tertiary	Delivery Service	M. E	Yes
Fent13	30-40	Tertiary	Bakery	M. E	Yes
Fent14	18-29	Tertiary	Crochet	M. E	Yes
Fent15	18-29	Secondary	Fashion Design	M. E	Yes
Fent16	18-29	Secondary	Fabric Trading	M. E	Yes
Fent17	41-50	Secondary	Fabric Trading	M. E	Yes
Fent18	41-50	Secondary	Fabric Trading	M. E	Yes
Fent19	41-50	Basic	Spice Shop	M. E	No
Fent20	30-40	Secondary	Fabric (Scarf)	M. E	Yes
Fent21	18-29	Secondary	Fabric Trading	M. E	Yes
Fent22	50 and above	Basic	Fabric (Lace)	M. E	Yes
Fent23	50 and above	No Education	Fabric Trading	M. E	No
Fent24	50 and above	Secondary	Fabric Trading	M. E	No
Fent25	50 and above	Secondary	Fabric (Scarf)	M. E	Yes
Fent26	18-29	Secondary	Hair Salon	M. E	Yes
Fent27	30-40	Basic	Selling Food stuff	M. E	Yes
Fent28	50 and above	Basic	Seamstress	M. E	Yes
Fent29	18-29	Basic	Provisions Shop	M. E	Yes
Fent30	41-50	Basic	Provisions Shop	M. E	Yes

Author Notes: Micro Enterprise is used to represent businesses with less than 5 employees

Small Enterprise (S.E.) represents businesses with 5 to 29 employees

Table 1 shows a wide range of entrepreneurs and lines of business. At the top of the table are entrepreneurs who trade in *textiles and fashion design* (13), followed by *food and provisions* (5), *hair business* (3) and *crafts, decorations and events* (3). One key observation is that almost half of the respondents are into textiles and fashion design. This observation reiterates the findings of Mensah (2023), who found that "a greater percentage of women's enterprises are in low-income and over-concentrated informal sectors in agriculture and garments and textiles…". Another interesting observation from the demographics that is worth pointing out is that not all entrepreneurs are engaged in single ventures, hence their categorisation crosses boundaries. For instance, Fent 5 (as seen in the table) finds herself in the hair business as well as crafts, decorations and events (In order not to upset the total, the researcher classified her under hair business). Similarly, Fent 6 and Fent 8 are into the importation and distribution of a variety of products. This may explain the nature of the entrepreneurship eco-system, especially among women who may explore different sectors based on demand. Again, the table shows that the female entrepreneurs are engaged in micro to small enterprises in line with Asiedu et al (2018). Micro enterprises consisted of fewer than 5 employees, and small enterprises had an employee range of 5 to 29. This observation shows the difficulties female entrepreneurs face in investing and breaking ground in medium to large-sized enterprises.

Two key demographics that are captured in the table are *Age* and *Education.* These two social variables are key factors in most studies as they may predict behaviour or contextualise findings. Four age groups were identified: 18-29, 30-40, 41-50, and 50 and above. The data shows that the majority of the female entrepreneurs who participated in the study are aged between 18 and 29 (14, almost 50%). The next dominant age group is 30 to 40 (7), with only 11 respondents aged 40 and above. This gives a picture of a young population for the study. In terms of education, 12 of them had tertiary education; nine (9) had secondary education; eight

(8) had basic education, and only one (1) said she had no education. In the subsequent sections, I discuss the findings of the three research questions.

4.2 RO 1: The Digital Divide among Ghanaian Female Entrepreneurs

The first research objective sought to examine the nature and extent of the digital divide faced by Ghanaian female entrepreneurs in Accra. The main assumptions of the Resource-Based Theory are that: capabilities and resources provide bases for different entities to compete, and that performance differences can be attributed to resource (un)availability (Mile, 2012). In the context of the proposed study, digital access and digital skills are considered resources that are available to female entrepreneurs and which can serve their entrepreneurial and business needs.

4.2.1 Digital Access

Exploring the digital divide among female entrepreneurs, just like similar studies on the digital divide, began with examining (lack of) access to digital resources. The questionnaire sought responses on digital technology usage by the 30 respondents. As can be seen in Table 2, out of the 30, 27 had access to a smartphone, computer or tablet, and three (3) indicated they did not have access; when asked about internet access, 26 answered they had regular access to the internet, and four (4) answered no.

Table 2: Digital Access among Ghanaian Female Entrepreneurs

Domain	Digital device	Internet Access
Digital Access	27	26
Lack of Access	3	4
Total	30	30

The literature on digital divide reports that the first interpretation of the digital divide is a gap in ICT access which is measured by the number and spread of telephones and web-enabled computers (Ohemeng & Adarkwah, 2014) and internet connectivity. The findings revealed that a significant proportion of the respondents have access to a form of digital device. The data is

similar for access to the internet connection. It is not surprising that almost all respondents indicated having access because even though the problem of connection persists in parts of the country, Accra (like most urban cities) has strong internet connectivity, a confirmation of Ofosu-Asare's (2024) study.

The findings on the spread of digital devices corroborate Kwaah et al. (2022), who observed that eight (8) out of 10 people have access to digital devices in Ghana, with their focus being on the youth. It is interesting that age influences digital technology usage because two (2) out of the three (3) female entrepreneurs who lack access to digital technology are aged 50 and above, and the third is aged between 40 and 50. All the entrepreneurs who are aged below 40 reported having access to a digital device (smartphone, tablet, etc.). The number and spread of digital technology in developing countries (even among the least income groups) is increasing, and this reflects the findings in this study. As Okae (2018) puts it, the smartphone, an internetpowered mobile phone, has become a norm and a must-have digital device for a cross-section of age groups and income groups. This finding corroborates his study as the data shows that digital technology use cuts across people with different educational backgrounds and across different age groups. However, it is more likely for older female entrepreneurs to not have a smartphone compared to entrepreneurs under 40 years. Again, whereas Boateng et al. (2018) identified poor internet connectivity and lack of electricity among factors causing the digital divide (in rural communities), the responses show that people in the urban areas are not affected by these factors. The data establishes that there is a form of digital divide in digital access, but this affects a few entrepreneurs, pointing to the possibility that the digital divide is shifting from a gap in access to other gaps like skills and use. These other forms are explored in the next sections.

Digital Skills and Use of Digital Technology among Female Entrepreneurs

After observing the female entrepreneurs' access to digital technology, we sought to investigate their use of digital resources. This is in line with the form of digital divide which results from the use of digital technology for purposes like business (in this case). Studies make a distinction between the digital divide that results from a lack of skills (literacy) and a lack of actual use (not necessarily because the person lacks the skills). As such, I first enquired about the female entrepreneurs' digital skills before they responded to questions about their use of digital technology.

4.2.2 Digital Skills

Digital skills or literacy refers to the knowledge and attitudes in operating digital tools, and as noted by van Deursen and van Dijk (2009, 2014), a gap that results from a lack of skills is conceptualised as a second-level digital divide. Following earlier classification of competencies into levels (basic, intermediate, advanced, etc), I asked the respondents to indicate their perceived competence level in terms of digital skills. The prompt question was: *How would you rate your digital skills (e.g., using social media, online banking, digital payments)?* Their responses are presented in the table below.

Table 3: Digital skills and perceived competence level of 30 Respondents

Level of Skills	**Frequency**
No Skills	5
Beginner	10
Intermediate	6
Advanced	9
Total	30

As shown in Table 3 above, five (5) respondents admitted to not having any digital skills (i.e. in the use of social media, digital payments, etc.); 10 (one out of three of the entrepreneurs) rated themselves as beginners (ability to use basic features of digital devices); six (6) indicated that they have intermediate (moderate) skills and nine (9) classify their digital skills as

advanced. The findings show that 15 (half of the respondents) have intermediate to advanced knowledge of digital technologies, and the remaining 15 are beginners and digital illiterates. The 50-50 picture shown here, as compared to the data on digital access, shows that the gap between digital skills set (digitally advanced and beginner/illiterates) is quite prominent and points to a second-level digital divide as discussed by van Deursen and van Dijk (2009; 2014) and Jin and Cheong (2008).

The study further explored digital skills and competence among the respondents to find out whether they have received any formal digital training, and if they have, where and how the training happened. The data showed that only four (4) female entrepreneurs indicated that they had received a form of training, as opposed to the 26 who said they had no formal training. The four respondents who answered in the affirmative (Fent 1, 5, 12 and 13) were required to answer the follow-up question: where/how did you receive the digital training? The responses were "in school and at work" (Fent 5); "in an institution" (Fent 13), and "self-taught" (Fent 1) (The fourth respondent did not provide a response). The fact that only four respondents had received a form of digital training (which included a respondent who had taught herself) shows the extent to which formal digital learning and/or training is limited, and why interventions in that regard may contribute to closing the divide. This corroborates with studies by Faugoo and Onaga (2022) and Arbeláez-Rendón et al. (2023), who recommended digital training and government programmes to target female entrepreneurs to reduce the digital divide and ensure inclusivity.

4.2.3 Digital use

Another form in which the digital divide manifests is the gap in use. Research has established that people may have digital access and digital skills, yet, for some reason, will not use digital technology. Ohemeng and Adarkwah (2014), basing on Fink and Kenny's interpretation of digital divide, explain this as a gap in actual use which is measured based on the use of ICT for various purposes (e.g. advertising, sales and transactions). This study sought to explore this

perspective of the digital divide by observing digital tool adoption for business and transactions, and which of the digital platforms are used frequently by the entrepreneurs.

4.2.3.1 Digital platforms for business

19 respondents answered that they used social media to conduct their business, while 11 respondents indicated that they did not use social media for business. The 11 who did not use social media for business included the four (4) who did not have access to the internet (who happened to be four out of the five respondents who identified themselves as having 'no digital skills') and the three (3) without smartphones. While this was predictable, there were some seven (7) respondents who had digital access and some digital skills but did not use social media for business. Table 4 below shows the digital platforms (social media and online markets) that are frequently used for business.

Table 4: Digital Platform Use by Ghanaian Female Entrepreneurs

Digital Platform	Frequency of Use
Facebook	5
Instagram	6
WhatsApp	18
Snapchat	5
TikTok	9
Jiji	1
Other	0

NB: Respondents could select more than one digital platform

Of the 19 who indicated their use of digital platforms for business, all except one (18) cited WhatsApp as their preferred platform for advertising and conducting business. The next frequent application was TikTok (9), followed by Instagram (6), Facebook (5), Snapchat (5) and Jiji (1). Bellaaj (2023) explains how and why entrepreneurs use digital channels for business and points to ease of use as a main factor. The increasing use of WhatsApp for business is noticed regularly as people utilise the Status feature to display their products and advertise their services. Recent software updates allow for WhatsApp users to create communities for

customers where business can be conducted just like in a traditional physical marketplace. Even when such entrepreneurs are using other digital platforms like Instagram and Facebook (as the data shows), entrepreneurs can link their WhatsApp accounts so that when customers click a link, it takes them to WhatsApp, where there can be direct communication. The use of TikTok is also on the rise, as reflected in the number of people who subscribe to its use for business. As a short-video sharing environment, TikTok enables users to record their products and services in an entertaining manner and share them with subscribers.

As argued by Naatu et al. (2024) and Bellaaj, (perceived) ease of use and perceived usefulness are key predictors of digital channel use. When asked what influenced their choice of these platforms, the female entrepreneurs cited reasons which included the platform's reach, popularity and followership. For instance, Fent 15, a fashion designer, indicated she used WhatsApp and TikTok for business, citing the following reasons:

> WhatsApp helps my contacts get easy views [*sic*] of my market post n tick-tock [*sic*] also get some of post go quiet [*sic*] viral, reaching people who yet [*sic*] to hear of my business [My posts on WhatsApp reaches my contacts easily, and my TikTok posts go viral which makes it easy for potential customers to know about my business – author's paraphrasing].

The respondent here touches on the main advantages of WhatsApp and TikTok: looking at the frequency of use of WhatsApp, contacts get to see posts easily; with TikTok posts and how easily videos go viral, potential customers may chance upon a post and engage the seller. The argument that WhatsApp is easy to use is reiterated by Fent 22, a fabric trader (lace), who noted that she uses WhatsApp for advertising because it is easy to use. Fent 10 also supported her choice of Snapchat and WhatsApp with the number of followers she has (most likely on Snapchat). The more followers one has, the easier a post reaches more people, and this reasonably influences the choice of digital platform to use for advertisements. It is not

surprising then that Facebook recorded less usage if you look at the number of new platforms which have sprung up in the last few years.

Overall, the data shows that only 19 respondents use digital platforms for business, while 11 fall behind the digital divide. The disparity between the number of respondents with access to digital technologies (27) and those who use the digital platforms (19) is glaring and shows the nature of the digital divide among female entrepreneurs. This observation confirms Friederici et al. (2020), who found in their study that entrepreneurs, while acknowledging the availability and wide use of mobile phones, saw a vast difference between the number of people with access to phones and those who engage in digital marketing.

The finding shows that there is indeed a gap in the use of digital platforms, even though there is increased access to digital tools and some form of digital skills. What causes female entrepreneurs not to take advantage of digitalisation for business will be explored together with how the digital divide affects performance in the next section.

4.3 RO 2: Digital Divide and Performance of Female Entrepreneurs

Resources help facilitate the goals of an organisation (Resource-Based theory) (Miles, 2012), and in this digital era, the use of digital technologies in entrepreneurship is a game-changer and a powerful driver of local innovation in sub-Saharan Africa (Friederici, 2019). The second objective of this thesis was to observe the impact of the digital divide on entrepreneurial performance. To achieve this, I first explored the perceived advantages of using digital technology for business, followed by what causes female entrepreneurs not to pursue digital tools adoption for marketing (considering the perceived advantages), and ended with the impact of digital divide on their business operations. As such, this section is structured into three thematic areas: perceived advantages of digital technology use, challenges (obstacles)

encountered in the use of digital technology, and the impact of digital divide on female entrepreneurs.

4.3. 1 Perceived Advantage of Digital Use

To understand the possible relationship between digital technology adoption and business performance, the entrepreneurs were asked about the possible impact on business growth. The respondents indicated that using digital platforms for business leads a number of advantages, such as: their products reaching more people, interested people making enquiries, breaking distance barriers and getting more clients. These perceived advantages are demonstrated by the excerpts from the following respondents:

> Fent 21: I get more people making enquiries
>
> Fent 1: Getting clients online (in addition to walk-ins)
>
> Fent 5: It made buying and selling easier, and getting customers for my products was easier because I demonstrated my products and their usage online.
>
> Fent 12: It has helped me reach customers in all the regions in Ghana without them visiting my physical shop (which I do not have).

From the perspective of Fent 21, a trader who sells fabrics at Makola and who had indicated she used WhatsApp to advertise her fabrics, her WhatsApp posts attract interested customers to make enquiries about her products. Making enquiries is an important part of consumer behaviour, and it shapes their purchasing intention. Ordinarily, traditional markets are set up such that a customer walks in to make enquiries and decide whether he/she will purchase a product. Online enquiries ensure that customers are informed about the product (price, brand, measurement, etc.) and ask questions that develop trust in the seller before they make purchases. It logically follows that digital platforms increase the clientele of an entrepreneur as indicated by Fent 1, Fent 5 and Fent 12. It can be argued that the ultimate objective of any entrepreneur who adopts digital technology for business (either exclusively, as was the case with Fent 12, or in addition to a physical shop) is to increase the reach of their products and

services and consequently boost profit. With more people opting to shop online and have their items delivered to their doorsteps, it is not surprising that entrepreneurs who have their products advertised online will attract more customers and grow their businesses, compared to those who operate only in traditional markets. As noted by Fent 1, the online platforms do not necessarily replace physical shops; they offer a complementary advantage. Why then are more people behind the digital divide? The next section explores challenges encountered in the use of digital technology.

4.3.2 Challenges Associated with Digital Technology Use

This section explores the challenges female entrepreneurs encounter in their use of digital technology. The literature on digital divide has established that several factors account for digital divide, including but not limited to digital access, digital skills, etc. The responses from the entrepreneurs concerning their challenges in adopting digital technologies for business have been classified into five factors, as illustrated in Table 5.

Table 5: Factors affecting use of digital technology

Factors	**Frequency**
Lack of digital skills/training	8
Limited/No access to digital devices	1
Internet concerns	4
High Cost of digital tools and data	9
Cyber security concerns	1

The high cost of digital tools and internet data was ranked highest, with nine (9) respondents indicating it was a challenge. This was followed by a lack of digital skills and training (8), as it was earlier revealed that only four out of the 30 had received any form of digital training. Internet connectivity was mentioned by four (4) respondents, followed by limited access to digital devices and cybersecurity concerns (one person each). From the table, the two main

obstacles causing the digital divide are the high cost of devices and the internet, and the lack of training. The issue of high internet subscription, coupled with slow internet speed, has generated debates in Ghanaian public discourse, with Ghanaians threatening to boycott certain telecommunication networks due to perceived outrageous prices, slow internet speeds and unpredictable data consumption (Sowu, 2025); in the first half of 2025, this resulted in the Government giving telcos an ultimatum to improve service quality by the end of the year (Inusah, 2025). These concerns are well reflected in the challenges faced by female entrepreneurs in their plan to use digital technologies. Admittedly, digital engagements rely on high internet speed and an affordable subscription. As such, any discourse on the challenges of the digital divide should seek to address these causes.

4.3.3 Negative Effect of Digital Divide on Ghanaian Female Entrepreneurs

The study set out to examine the effect of the digital divide among female entrepreneurs on their productivity. To explore this, the respondents were asked if they believed the gap in digital technology use had any impact on sales and business growth, and if so, how the impact was felt.

When asked if they believe the digital divide affects business, 14 indicated it does affect business negatively, while nine (9) respondents did not see the divide as a disadvantage. Three (3) respondents were not sure and indicated ‘maybe’. The interesting observation here is that not everyone acknowledges the gap as a problem that needs to be addressed. For entrepreneurs who observed a negative impact on their business, they shared some perceived disadvantages as seen in excerpts from Fent 2 (Wigmaker), Fent 14 (Crocheter), Fent 15 (Fashion Designer) and Fent 20 (Scarf/Fabric trader).

Fent 2: It takes a while for people to notice you.

Fent 14: It slows business publicity.

Fent 15: Not using any digital technology makes your market circle small and very hard to reach far beyond your environment.

Fent 20: [It leads to] Low sales.

From the responses, the effect of the digital divide is realised in reduced access and publicity, smaller clientele and limited reach, and ultimately limited sales. In the view of Fent 2, it takes longer for people to identify a product or service if the vendor is limited to a particular shop as compared to a vendor who advertises her products to a larger online audience (and still attend to people who see the shop and walk in. This explains Best et al.'s (2024) conclusion that female entrepreneurs in the Caribbean who are not affected by digital divide are able to reach international markets from their remote islands. On the other hand, as indicated by Fent 15 and Fent 20, digital divide impacts a business' reach and results in low sales. The other respondents identified impacts such as 'low patronage of items' (Fent 7), 'Not able to rest and work from home' (Fent 9), and 'Less Clients' (Fent 1). Having identified the negative impact of the digital divide on their business, the female entrepreneurs were asked to identify the coping mechanisms they adopt and the general measures they adopt to avert the negative impact of the divide.

4.4 RO 3: Coping Mechanisms used by Ghanaian Female Entrepreneurs

The third research objective sought to examine the coping mechanisms adopted by Ghanaian female entrepreneurs in Accra in relation to the challenges of digital divide. The findings so far have revealed gaps in access, skills and use of digital technology, and respondents have indicated how this potentially influences business. To address this research objective, respondents were asked to indicate the support systems and/or coping mechanisms they

adopted to address the challenges caused by the digital divide, and in what forms the support came.

4.4. 1 Support from Family and Friends

The first form of support came from family and friends. Five (5) respondents (Fent 5, Fent 6, Fent 8, Fent 18 and Fent 21) indicated that, to cope with the challenges of the digital divide, they sought help from their family and friends. The study by Kwaah et al. (2022) confirms the observation in this study that when people are challenged by the digital divide, they tend to resort to friends and family to help them cope. This is mostly so because of the trust and no/low cost involved in seeking assistance from them.

4.4.2 Hiring Support Staff

While some resort to assistance from close relatives, some entrepreneurs employ people to purposely manage their online business accounts. Interestingly, only one respondent opted for this coping mechanism. Fent 13, who had indicated that she used Facebook, WhatsApp, Snapchat, Instagram and TikTok to promote her bakery business, had employed someone to handle the online side of the business. This coping strategy reiterates Khoo et al.'s (2024) finding that female entrepreneurs in the tourism sector in Latin America resorted to support staff for assistance in using digital technologies for business.

4.4.3 Attending Digital Training Workshops

The next coping strategy identified among the female entrepreneurs is digital training workshops. When asked how she coped with the challenges, Fent 12 responded, "I attend digital training workshops". The respondent was one of three who used the most number of

digital platforms (5), and the only female entrepreneur who indicated that she used digital platforms other than social media (Jiji). Even though she had already indicated that she saw her digital skills to be advanced, she admits to attending workshops on digital training. The call for training programmes for female entrepreneurs is probably one of the main interventions as discussed in studies like Arbeláez-Rendón et al. (2023) and Faugoo and Onaga (2022).

4.4.4 Shifting towards Physical Transactions

The study found that the challenges caused by the digital divide are causing more female entrepreneurs, even those who have digital platforms for business, to shift to physical transactions. When asked how they cope with the challenges, 19 (more than half of the respondents) indicated that their main preference is to transact business and payments physically. Some tend to use digital platforms only for advertisements and require interested parties to show up for the transaction to proceed. This shows the extent of the digital divide, the impact it has on female entrepreneurs and how they are managing the challenges.

4.5 Discussion

The results from the study provide interesting dynamics on the nature of the digital divide among Ghanaian female entrepreneurs, the impact and challenges and their coping mechanisms. It is worth noting from the findings that there is a form of digital divide in terms of access to digital devices and the internet, albeit not a wide gap. With close to 90% of the entrepreneurs having access to digital technology and the internet, it shows and confirms studies (Cohron, 2015; Cullen, 2001) which have indicated that there is a shift from a digital divide caused by lack of access to other forms of divide, as illustrated by Ohemeng and Adarkwah (2014).

The second and third manifestations of the digital divide are gaps in the ability to use digital technologies and gaps in the actual use of digital platforms for various purposes. The results from this study show that this is the nature of the digital divide among female entrepreneurs in Accra. There is clearly a mismatch between the number of entrepreneurs who own or have access to digital technology and those who have the digital skills or use these devices for business, and these are reflected in the data. In other words, access to digital devices does not translate to digital skills or the use of digital platforms for business purposes. With half the respondents having at most beginner skills, it shows that there are as many entrepreneurs who are digitally disadvantaged as those who are advantaged. What is interesting, however, is that the lack of skills does not prevent female entrepreneurs from using digital platforms (mainly social media) due to their perceived ease of use and usefulness to their business. Indicators like the number of followers a person has, how easily one can use an application and how that application can earn her more customers influence their use of digital technology.

The entrepreneurs mostly agreed that digital technology offers advantages for businesses, and the digital divide tends to pose some challenges for business growth. The advantages ranged from *publicity and reach of their products*, *interested parties being able to make enquiries and initiate transactions*, and *the growth of their clientele*. Despite these advantages, female entrepreneurs are challenged in their use of digital technology for business, and these usually result from factors such as a *lack of digital skills and training, high cost of internet, cybersecurity concerns,* among others. These factors are equally discussed in the literature (Boateng et. al, 2018; Ofosu-Asare, 2024) as some of the leading factors that prevent digital technology use, especially by female entrepreneurs. As such, the efforts to close the gaps may not yield any results until these factors are addressed.

The negative effect of the digital divide was examined, premised on the argument that the digital divide among female entrepreneurs affects their productivity. While almost half of the

entrepreneurs indicated that the digital divide affects their productivity, not everyone acknowledges the gap as a problem that needs to be addressed. Looking at the challenges facing the adoption of digital technology, especially the high cost of internet and airtime in Ghana (Sowu, 2025), one can understand why female entrepreneurs will take their chances with traditional marketing and transactions. For some, it is expensive to adopt digital marketing, and since business is about making profits (and for small and medium businesses, there is not much to gain), they may weigh the pros and cons and decide against it. That notwithstanding, the female entrepreneurs pointed to some disadvantages of the digital divide, namely, low publicity, small customer base and low sales.

The coping strategies that are adopted by female entrepreneurs amidst the challenges ranged from seeking support from family and friends, hiring the services of IT/digital support staff and attending digital training workshops. These strategies are discussed in the literature by Kwaah et al. (2022), Khoo et al.(2024), Arbeláez-Rendón et al. (2023) and Faugoo and Onaga (2022), among others. It is worth noting that most of the female entrepreneurs, in the face of the challenges posed by the digital divide and despite the advantages of using digital technology, prefer to use physical transactions.

4.6 Chapter Summary

The fourth chapter discussed the findings of the study based on the data collected from 30 female entrepreneurs. Data were collected using questionnaires which combined open-ended and closed-ended questions. Also, because questionnaires were mainly administered in person, participants could seek clarification, and questions could be asked of the researcher. The findings were discussed under the three main research objectives. The main findings were that the nature of the digital divide is mainly realised in digital skills and digital use. Also, coping mechanisms included seeking assistance from family and friends, hiring IT support staff, and attending digital workshops.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter concludes the study, summarises key findings, and offers recommendations for stakeholders. It also outlines suggestions for future research.

First, I present a summary of the study, followed by a summary of the findings in accordance with the three research questions: What is the extent of the digital divide among Ghanaian female entrepreneurs? How does the digital divide affect the performance of female entrepreneurs, and what coping mechanisms are adopted to curb potential challenges? This is followed by conclusions from the findings, recommendations based on the key findings and suggestions for further studies.

5.1 Summary of the study

This study set out to explore the digital divide among Ghanaian female entrepreneurs and the coping mechanisms they adopt to navigate digital challenges. Grounded in the Resource-Based Theory (RBT), the research examined digital access, digital skills, and the impact of digital inequality on entrepreneurial performance. The study was motivated by the growing relevance of digital technologies in business and the limited scholarly attention to the gendered dimensions of the digital divide in Ghana.

The study was underpinned by three research objectives as follows:

1. To measure the extent of the digital divide among female entrepreneurs in a Ghanaian community.
2. To observe the impact of the digital divide on entrepreneurial performance.
3. To interrogate the coping mechanisms adopted by entrepreneurs to curb perceived challenges of the digital divide.

The study adopted a qualitative case study approach, using responses from 30 female entrepreneurs in Accra. The study uncovered interesting and nuanced insights into how the digital divide manifests among female entrepreneurs and how they navigate these challenges.

5.2 Key Findings

The purpose of the study was to find out the extent of the digital divide among Ghanaian female entrepreneurs and their coping mechanisms.

With regards to the first research objective, the study found that there is a form of digital divide in terms of access to digital devices and the internet, albeit not a wide gap. With close to 90% of the entrepreneurs having access to digital technology and the internet. However, there is a gab in digital skills and digital use, which shows and confirms studies (Cohron, 2015; Cullen, 2001) which have indicated that there is a shift from a digital divide caused by lack of access to other forms of divide such as gaps in the ability to use digital technologies and gap in the actual use of digital platforms for various purposes. The results from this study show that this is the nature of the digital divide among female entrepreneurs in Accra.

The second research objective sought to observe the impact of the digital divide on entrepreneurial activities. It was found that the digital divide negatively affected business growth, market reach, and operational efficiency. Entrepreneurs with limited digital skills and a lack of technology use struggled to leverage online platforms for publicity, customer engagement, and increased sales and customer base.

Finally, the coping mechanisms adopted by the female entrepreneurs to mitigate digital challenges included relying on family members or friends, hiring staff for digital tasks, attending informal training sessions, and resorting to offline transactions.

5.3 Conclusion

Based on the findings of the study, some conclusions have been drawn. The study enhances our understanding of the gap that exists between Ghanaian female entrepreneurs who use digital

technology for their business and those who do not use the internet for business. The study has identified the nature of the digital divide and the rate of digital illiteracy, which reinforces the divide. The study concludes that problems pertaining to the high cost of internet and connectivity, and digital skills are the two main predictors of digital technology use.

While female entrepreneurs generally admit to the positive advantages of digital technologies, they are faced with challenges that compel them into a digital divide. This results in challenges of reduced publicity and reduced efficiency. The point, however, remains that they are aware of the potential benefits they stand to gain from digital technologies, and this is promising for Ghana's entrepreneurial growth.

5.4 Recommendations

Based on the findings, the following recommendations are proposed:

1. Government, through the Ministry of Communication, Digital Technology and Innovations and the Ministry of gender, Children and Social Protection, should invest in community-based digital training hubs. These training hubs should be tailored to offer hands-on training to female entrepreneurs to enhance their effective use of technology to boost productivity.
2. Formal and Informal vocational institutions (hairdressing, tailoring schools, etc) should integrate digital literacy and social media advertising into their curriculum to help graduates share their products and services with large customer bases.
3. There should be government interventions in internet cost regulations and strong internet connections to foster affordability and ease of use of digital technologies.
4. There should be the promotion of gender-sensitive ICT policies and general education on the benefits of ICT. Policies should recognise and address the unique barriers faced by women in accessing and using digital technologies. And education should address the concerns about using digital technology, such as perceived cybersecurity threats.

5.5 Suggestions for Future Research

This study opens room for further studies:

Since this study focused on female entrepreneurs in Accra, a comparative study between urban and rural female entrepreneurs could reveal geographic disparities in digital access and use. Again, the qualitative nature of this study did not lend itself to a larger sample size, researchers can apply quantitative and longitudinal approaches to measure the extent of the digital divide among female entrepreneurs in Ghana and how time has affected the dynamics of technology use.

REFERENCES

Adom, K. (2015). Recognizing the contribution of female entrepreneurs in economic development in sub-Saharan Africa: Some evidence from Ghana. *Journal of Developmental Entrepreneurship*, *20*(01), 1-24, http://dx.doi.org/10.1142/S108494671550003X

Arbeláez-Rendón, M., Giraldo, D. P., & Lotero, L. (2023). Influence of digital divide in the entrepreneurial motor of a digital economy: a system dynamics approach. *Journal of Open Innovation: Technology, Market, and Complexity*, *9*(2), 100046. https://doi.org/10.1016/j.joitmc.2023.100046

Asiedu, E. M., Shortland, S., Nawar, Y. S., Jackson, P. J., & Baker, L. (2019). Supporting Ghanaian micro-entrepreneurships: the role of mobile technology. *Journal of Entrepreneurship in Emerging Economies*, *11*(3), 306-327. https://doi.org/10.1108/JEEE-05-2018-0046

Ayisi, A., Yeboah-Banin, A. A., Oye, A., & Ocloo, P. E. D. (2024). Access to Digital Media and Digital Literacy among Ghanaian Youth: An Explore, Engage, Empower Model Study. *African Journalism Studies*, 1-20. https://doi.org/10.1080/2331186X.2022.2107292

Bellaaj, M. (2023). Why and how do individual entrepreneurs use digital channels in an emerging market? Determinants of use and channel coordination. *International Journal of Emerging Markets*, *18*(9), 2735-2764. https://doi.org/10.1108/IJOEM-08-2020-0882

Best, B., Lassalle, P., & Nicolopoulou, K. (2025). Unlocking the "SHERO" within: an exploration of how female entrepreneurs in the Caribbean use digital technologies for business transformation. *International Journal of Gender and Entrepreneurship*, *17*(1), 65-93. https://doi.org/10.1108/IJGE-03-2024-0093

Boateng, R., Mbrokoh, A.S., Boateng, L., Senyo, P.K. and Ansong, E. (2018), "Determinants of e-learning adoption among students of developing countries", *International Journal of Information and Learning Technology, 35*(1), 45-62, https://doi:10.1108/IJILT-072017-0058.

Brennen, J. S., & Kreiss, D. (2016). Digitalisation. *The international encyclopedia of communication theory and philosophy*, 1-11. https://doi.org/10.1002/9781118766804.wbiect111

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Sage.

Cullen, R. (2001). Addressing the digital divide. *Online Information Review*, 25(5), 311 - 320. https://doi.org/10.1108/14684520110410517

Cunningham, J. B., & Lischeron, J. (1991). Defining entrepreneurship. *Journal of small business management*, *29*(1), 45-61.

Delle, S. J. (2022). *Tech ɔhemaas: The making of female technology entrepreneurs in Ghana* (Doctoral dissertation, University of Birmingham).

Drydakis, N. (2024). Reducing the gender digital divide amongst immigrant entrepreneurs. In *Sustainable Economic Development* (pp. 237-264). Routledge.

ElSayary, A. (2023). The impact of a professional upskilling training programme on developing teachers' digital competence. *Journal of Computer Assisted Learning*, *39*(4), 1154-1166. https://doi.org/10.1111/jcal.12788

Faugoo, D., & Onaga, A. I. (2022). Establishing a resilient, economically prosperous and inclusive world by overcoming the gender digital divide in the new normal.

In *Responsible Management of Shifts in Work Modes–Values for a Post Pandemic Future, Volume 1* (pp. 115-129). Emerald Publishing Limited.

Faulkner, S. L., & Trotter, S. P. (2017). Data saturation. *The International Encyclopedia of Communication Research Methods*, 1-2.

Friederici, N. (2019). Innovation hubs in Africa: What do they really do for digital entrepreneurs? In *Digital entrepreneurship in sub-Saharan Africa: Challenges, opportunities and prospects* (pp. 9-28). Cham: Springer International Publishing.

Friederici, N., Wahome, M., & Graham, M. (2020). *Digital entrepreneurship in Africa: How a continent is escaping Silicon Valley's long shadow*. The MIT Press.

Gartner, W.B. (1985), "A conceptual framework for describing the phenomenon of new venture creation", Academy of Management Review, Vol. 10 No. 4, pp. 696-706. https://doi.org/10.5465/amr.1985.4279094

Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship? Journal of Business Venturing. 5: 15-28. https://doi.org/10.1016/0883-9026(90)90023-M

Inusah, A.M. (2025, May 31). Sam George gives telcos ultimatum to fix poor network services or face sanctions by end of 2025. *GhanaWeb.* *https://www.ghanaweb.com/blogs/attractivenews/Sam-George-Gives-Telcos-Ultimatum-to-Fix-Poor-Network-Services-or-Face-Sanctions-by-End-of-2025-11794*

Kellermanns, F., Walter, J., Crook, T. R., Kemmerer, B., & Narayanan, V. (2016). The resource-based view in entrepreneurship: A content-analytical comparison of researchers' and entrepreneurs' views. *Journal of Small Business Management*, *54*(1), 26–48. https://doi.org/10.1111/jsbm.12126

Khoo, C., Yang, E. C. L., Tan, R. Y. Y., Alonso-Vazquez, M., Ricaurte-Quijano, C., Pécot, M., & Barahona-Canales, D. (2024). Opportunities and challenges of digital competencies for women tourism entrepreneurs in Latin America: a gendered perspective. *Journal of Sustainable Tourism*, *32*(3), 519-539. https://doi.org/10.1080/09669582.2023.2189622

Kwaah, C. Y., Adu-Yeboah, C., Amuah, E., Essilfie, G., & Somuah, B. A. (2022). Exploring preservice teachers' digital skills, stress, and coping strategies during online lessons amid covid-19 pandemic in Ghana. *Cogent Education*, *9*(1), 2107292. https://doi.org/10.1080/2331186X.2022.2107292

McAdam, M. (2013). *Female entrepreneurship*. Routledge.

Mensah, M. S. B. (2023). A gendered analysis of opportunities and challenges in Ghana's entrepreneurship eco-system. *Journal of Contemporary Management*, *19*(1), 125-157. https://doi.org/10.35683/jcm22045.203

Miles, J.A. (2012). *Management and organisation theory.* Jessey-Bass: San Francisco.

Naatu, F., Selormey, F. S., & Naatu, S. (2024). Determinants of digital technology adoption in sub-Sahara Africa: Ghana. *International Journal of Emerging Markets*.

Ofosu-Asare, Y. (2024). Developing classroom ICT teaching techniques, principles and practice for teachers in rural Ghana without access to computers or internet: a framework based on literature review. *The International Journal of Information and Learning Technology*, *41*(3), 262-279. https://www.emerald.com/insight/content/doi/10.1108/ijilt-04-2023-0045

Ohemeng, F. L. K., & Ofosu-Adarkwa, K. (2014). Overcoming the digital divide in developing countries: An examination of Ghana's strategies to promote universal access to

information communication technologies (ICTs). *Journal of Developing Societies*, *30*(3), 297-322. https://doi.org/10.1177/0169796X14536970

Okae, P. (2018). A qualitative study of smartphone usage patterns: the case of Ghana. *Science World Journal*, *13*(2), 58–63. https://doi.org/10.4314/swj.v13i2.

Pierce, J. (2018). *Digital Divide*. In H. Renee, & P. Mihailidis, The International Encyclopedia of Media Literacy (pp. 1-18). New York: John Wiley & Sons.

Prince, S., Chapman, S., & Cassey, P. (2021). The definition of entrepreneurship: is it less complex than we think?. *International Journal of Entrepreneurial Behavior & Research*, *27*(9), 26-47. https://www.emerald.com/insight/content/doi/10.1108/ijebr-11-2019-0634/full/html

Ragnedda, M., & Muschert, G. W. (2013). *The digital divide*. Florence, KY: Routledge.

Radovanović, D. (2013). The Internet and digital divide in South Eastern Europe: Connectivity does not end the digital divide, skills do 1. In *The Digital Divide* (pp. 167-178). Routledge.

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., ... & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality & Quantity*, *52*(4), 1893-1907.

Sowu, K. (2025, May 10). Telcos in Ghana: A frustrating tale of poor service, rude staff, and needless stress. *Myjoyonline*. https://www.myjoyonline.com/telcos-in-ghana-afrustrating-tale-of-poor-service-rude-staff-and-needless-stress/

Van Deursen, A. J., & Van Dijk, J. A. (2009). Improving digital skills for the use of online public information and services. *Government information quarterly*, *26*(2), 333-340. https://doi.org/10.1016/j.giq.2008.11.002

Van Deursen, A. J., & Van Dijk, J. A. (2014). *Digital skills: Unlocking the information society*. Springer.

World Bank, (2019). *Profiting from Parity: Unlocking the Potential of Women's Businesses in Africa.* World Bank: Washington D.C.

Zhao, Y., Llorente, A. M. P., & Gómez, M. C. S. (2021). Digital competence in higher education research: A systematic literature review. *Computers & education*, *168*, 1-14. https://doi.org/10.1016/j.compedu.2021.104212

APPENDIX

Questionnaire for Data Collection

Title of Study**: The Digital Divide Faced by Ghanaian Female Entrepreneurs and the Coping Mechanisms**

A questionnaire to study the digital divide among Ghanaian female entrepreneurs:

Dear Participant,

This questionnaire is designed to seek your opinion and observation about the difference/gab between Ghanaian female entrepreneurs who use the internet and those who do not, the challenges and coping mechanisms**.** This is an academic exercise and the information obtained will be used solely for research purposes. It will take less than 10 minutes. We will not pay any money for information you give us, and we will not link the information you give us to your identity in any way. You can withdraw your participation at any time.

Informed Consent: Do you give consent to participate in this study?.....

Signature/Alias……

Section A: Digital Access and Literacy

1. Do you own a smartphone, computer, or tablet?
    a. Yes
    b. No
2. Do you have regular access to the internet?
    a. Yes
    b. No
3. How would you rate your digital skills (e.g., using social media, online banking, digital payments)?
    a. Beginner c. Intermediate
    b. Advanced d. No skills
4. Have you received any formal digital training?
    a. Yes
    b. No
5. If your answer to 4 is Yes, where/how did you receive the digital training?

    ……

    …..

Section B: Digital Tool Adoption, Usage and Impact

6. Do you use social media (e.g. Instagram, WhatsApp) for business purposes?
    a. Yes
    b. No
7. Do you sell products or advertise services on online markets (like Jiji, Tonaton)? a. Yes

    b. No
8. If your answers to 6 and 7 are yes, please indicate the digital platforms you use (Tick all that apply)
    a. Facebook d. Instagram

b. Snapchat e. TikTok
c. WhatsApp f. Jiji
g. Others (please specify)……,

9. If you answered 8, what are your reasons for choosing these digital platforms?

……

……

……..

10. If you do not use digital platforms for business, what are your reasons?

……

……

11. Do you use digital payment methods (like MoMo, mobile banking)?
    a. Yes
    b. No
12. Which digital payment method do you use the most?
    a. MoMo
    b. Mobile Banking
    c. Other (Please specify)……
13. How has digital technologies and platforms impacted your business growth?

……

……

Section C: Challenges and Coping Mechanisms

14. Do you believe that NOT using digital technology for business affect growth and sales?
    a. Yes
    b. No
    c. Maybe
15. What are some of the disadvantages of not using digital technology for business?

……

……

16. What challenges do you face in adopting digital technologies for business? (Select all that apply)
    a. Lack of digital skills/training
    b. Limited/No access to digital devices
    c. Unreliable internet connectivity
    d. High Cost of digital tools and data
    e. Other (please specify) ……

17. Do you have access to support systems (e.g., mentorship, training) to help you overcome digital challenges?
    a. Yes
    b. No
18. How do you currently overcome digital challenges? (Select all that apply)

a. I seek help from family/friends c. I attend digital training workshops
b. I prefer physical transactions d. I have employed someone for online sales
e. Other (please specify) …….

19. What strategies have you found most effective in coping with digital challenges?

……
……
…….

Section D: Demographic Information

20. What is your age range?
a. 18-29
b. 30-40
c. 41-50
d. 51 and above

21. What is your highest level of education?
a. Basic
b. Secondary
c. Tertiary
d. Vocational
e. Other (please specify)……..

22. What business are you engaged in? ……

23. What type of business do you own?
a. Micro-enterprise (less than 5 employees)
b. Small enterprise (5-29 employees)
c. Medium enterprise (30-99 employees)

THANK YOU FOR PARTICIPATING