

AME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

INSTITUTE OF DISTANCE LEARNING (IDL)

DEPARTMENT OF MARKETING AND CORPORATE STRATEGY

KNUST

**EFFECT OF COVID 19 PANDEMIC ON MARKET TURBULENCE AND
PERFORMANCE OF SMES. THE MODERATING ROLE OF FIRM
INNOVATIVENESS. A CASE STUDY OF KASOA MUNICIPALITY**

BY

FRANCIS OSEI

PG9211621

**A thesis submitted to the Department of Marketing and Corporate Strategy of the
School of Business, Kwame Nkrumah University of Science and Technology, Kumasi in
Partial fulfilment of the requirements for award of**

MASTERS OF SCIENCE MARKETING

OCTOBER 2023

DECLARATION

I hereby declare that this thesis is the result of my own original work towards the master of science in marketing and that except for other people's work which have been duly acknowledged at reference section, no part of it has been presented for another master's degree in this or any other College.

I am therefore responsible for the views express and factual exactness of its content.

Candidate Name

Francis Osei

PG9211621

Signature

Date

Certified by

Dr Enya Ameza-Xemalordzo.

Signature

Date

Supervisor

Certified by

Prof. Ahmed Agyapong

Head of Department

Signature

Date

DEDICATION

I dedicate this thesis to my parents, whose boundless love and selflessness have shaped my path in profound ways. To my siblings, you gave more than you had to ensure that I could grasp the chance for education. Your tireless efforts, relentless sacrifices, and unwavering belief in my potential have been the driving force behind my pursuit of knowledge.

As I stand on the threshold of understanding, armed with the tools to unravel the mysteries of our world and beyond, I am acutely aware that this key is not only a representation of academic achievement but also a testament to resilience and determination. You have ignited the spark of curiosity within me and instilled values that extend far beyond the pages of this thesis. Your sacrifices are etched into every word I write, every discovery I make, and every aspiration I reach for. Thank you all for being my guiding stars, my pillars of strength, and my unwavering champions. This achievement is as much yours as it is mine.



ACKNOWLEDGEMENT

We would like to express our greatness thanks to the Almighty God for giving the strength, wisdom, ideas and the ability to undertake this project.

I am also very grateful to Dr, Enya Ameza-Xemalordzo my supervisor for his wonderful attention and guidelines towards the success of this thesis work. The next goes to my Kids, my boss Henrietta wood, Sis Gifty Adjei-Quaye, Mr Samuel Appiah, Dr Rahman for his wonderful contribution and support towards the success of this thesis work and throughout my academic

ladder. My indebtedness also goes to Klenam K. Ledi for providing advice regarding analysis and other research areas. I also wish to register my heartfelt appreciation to all colleagues for their support during this project.

KNUST



ABSTRACT

Crunches in business are intricated which influences both short-term and long-term performance if not given immediate attention. The study is on effect of covid 19 pandemic on market turbulence and performance of SMES. The moderating role of firm innovativeness. The study seeks to examine the relationship between Covid-19 on market turbulence, assess the impact of Covid-19 pandemic on SME's performance, evaluate the moderating role of firm innovativeness on the relationship between covid-19, and SMEs performance and to evaluate the moderating role of firm innovativeness on the relationship between covid-19, and market turbulence.

The study was a deductive research approach and quantitative research method with the descriptive research design. The research used convenient sampling techniques to select respondents. Likert scales questionnaire was used to collect primary data from respondents with the use of SPSS for analysis.

The findings revealed that there is a connection among covid-19 pandemic and market turbulence. It is determined that market turbulence had an influence to covid-19 pandemic. The correlation coefficient shows that there is a significant and a strong positive relationship between covid-19 and market turbulence. Also, there is a connection among covid-19 pandemic and SMEs performance. Covid-19 pandemic have an influence on SMEs performance. The correlation coefficient shows that there is a significant and a strong negative relationship between covid-19 and SMEs performance. Again, there is a moderation effect of firm innovativeness on the affiliation between Covid-19 and SMEs performance whiles firm innovativeness moderation on the effect of among covid-19 and market turbulence.

TABLE OF CONTENT

Contents	Page
DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENT	vi

LIST OF TABLES	
	xi

CHAPTER ONE	
	1

1.0 INTRODUCTION	
	1

1.1 BACKGROUND OF THE STUDY	
	1

1.2 STATEMENT OF THE PROBLEM	3
------------------------------------	---

1.3 RESEARCH OBJECTIVES	
	3

1.4 RESEARCH QUESTION	
	5

1.5 SIGNIFICANCE OF THE STUDY	
	5

1.6 SCOPE OF THE RESEARCH	
	6

1.7 OVERVIEW METHODOLOGY	
	6

1.8 ORGANIZATION OF THE STUDY	
	7

CHAPTER TWO	
	8

LITERATURE REVIEW	
	8

2.0 INTRODUCTION	
	8

2.1 COVID-19 PANDEMIC	8
2.2 MARKET TURBULENCE	9
2.3 FIRM INNOVATIVENESS	9
2.4 PERFORMANCE OF SME'S	11
2.5 THEORETICAL FRAMEWORK	13
2.5.1 RESOURCE-BASED VIEW THEORY	13
2.5.2 THE SOCIAL-ECOLOGICAL THEORY	13
2.5.3 MARKET DYNAMISM	14
2.6 HYPOTHESIS DEVELOPMENT.....	16
2.6.1 CONNECTION CONCERNING COVID-19 ON MARKET TURBULENCE	16
2.6.2 COVID-19 PANDEMIC AND SME PERFORMANCE	17
2.6.3 FIRM INNOVATIVENESS ON THE CONNECTION AMID COVID-19, AND SMES PERFORMANCE	19
2.6.4 FIRM INNOVATIVENESS ON THE CONNECTION AMID COVID-19, AND MARKET TURBULENCE.	21
2.7 CONCEPTUAL FRAMEWORK	25

CHAPTER THREE	
26 RESEARCH	
METHODOLOGY.....	26
3.0 INTRODUCTION	
26	
3.1 RESEARCH PHILOSOPHY	
26	
3.2 RESEARCH DESIGN	
27	
3.4 RESEARCH APPROACH	28
3.5 POPULATION OF THE STUDY	
28	
3.6 SAMPLE SIZE AND SAMPLING TECHNIQUES	
29	
3.7 DATA COLLECTION PROCEDURE	
30	
3.7.1 SOURCES OF DATA	30
3.7.2 MEASUREMENT INSTRUMENT	
31	
3.7.3 PILOT TEST	
32	
3.7.4 DATA COLLECTION	32
3.8 RELIABILITY AND VALIDITY	
34	
3.9 DATA ANALYSIS	34
3.10 ETHICAL CONSIDERATIONS	
35	

3.11 LIMITATION OF THE RESEARCH	35
---------------------------------------	----

CHAPTER FOUR

37

DATA ANALYSIS AND INTERPRETATIONS 37

4.0 INTRODUCTION 37

4.1 RESPONSE RATE 37

4.2 DEMOGRAPHIC OF THE RESPONDENTS 38

4.2.1 SEX OF RESPONDENTS 39

4.2.2 AGE OF RESPONDENTS 39

4.2.3 POSITION OF RESPONDENTS 39

4.2.4 NUMBER OF YEARS WITH FIRM 39

4.3 VALIDITY OF THE CONSTRUCTS.....40

4.4 CORRELATION METRIX 41

4.5 MULTI-COLLINEARITY RESULTS 42

4.6 DESCRIPTIVE STATISTICS 43

4.7.1 ANALYSIS OF THE RELATIONSHIP BETWEEN COVID-19 AND MARKET

TURBULENCE	44
4.7.2 ANALYSIS OF THE RELATIONSHIP BETWEEN COVID-19 AND SME PERFORMANCE	45
4.7.3 THE MODERATING EFFECT OF FIRM INNOVATIVENESS ON THE RELATIONSHIP BETWEEN COVID-19, AND SMES PERFORMANCE	46
4.7.4 THE MODERATING EFFECT OF FIRM INNOVATIVENESS ON THE RELATIONSHIP BETWEEN COVID-19, AND MARKET TURBULENCE	47
4.8 DISCUSSION OF FINDINGS	48
4.8.1 THE RELATIONSHIP BETWEEN COVID-19 AND MARKET TURBULENCE	49
4.8.2 ANALYSIS OF THE RELATIONSHIP BETWEEN COVID-19 AND SME PERFORMANCE	49
4.8.3 THE MODERATING EFFECT OF FIRM INNOVATIVENESS ON THE RELATIONSHIP BETWEEN COVID-19, AND SMES PERFORMANCE	50
4.9.4 THE MODERATING EFFECT OF FIRM INNOVATIVENESS ON THE RELATIONSHIP BETWEEN COVID-19, AND MARKET TURBULENCE.	51
CHAPTER FIVE	52
SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION	52
5.0 INTRODUCTION	52
5.1 SUMMARY OF FINDINGS	52
5.1.1 RELATIONSHIP BETWEEN COVID-19 AND MARKET TURBULENCE	52
5.1.2 RELATIONSHIP BETWEEN COVID-19 AND SMES PERFORMANCE	53
5.1.3 THE MODERATING EFFECT OF FIRM INNOVATIVENESS ON THE	

RELATIONSHIP BETWEEN COVID-19 AND SMES PERFORMANCE.	53
--	----

5.1.4 THE MODERATING EFFECT OF FIRM INNOVATIVENESS ON THE RELATIONSHIP BETWEEN COVID-19 AND MARKET TURBULENCE.	53
--	----

5.2 CONCLUSION	54
----------------------	----

5.3 RECOMMENDATION	55
--------------------------	----

REFERENCE	56
-----------------	----

APPENDIX 1	61
------------------	----

LIST OF TABLES

Table 4.1: Response Rate.....	37
Table 4.2 Demographic of the respondents	38
Table 4.3 Reliability (Cronbach Alpha).....	41
Table 4.4 Correlation Matrix	42
Table 4.5 Multi-collinearity Results	43
Table 4.6 Descriptive Statistics.....	44
Table 4.7 Regression Analysis.....	46
Table 4.8 Moderation Analysis	48

KNUST



CHAPTER ONE

1.0 Introduction

This part of the study comprises the background of the study, problem statement, research objective, research question, the significance of the study, the scope of the study, an overview of methodology limitations as well as the organization of the study

1.1 Background of the study

Crunches in business are intricate which influences both short-term and long-term performance if not given immediate attention (Ansell and Boin 2019). According to Hamilton (2020), in the existence of crunches, firms like SMEs have to be innovative to stand against the turbulence. Small firms being innovative aid in sustaining market turbulence like the Covid-19 pandemics (Gupta 2020). According to Disoska (2020), crunches like the Covid-19 pose an unconstructive impact on the eagerness of SMEs to be innovative. Most nations on the continent have provided different measures in response to the covid-19 with diverse controlling dogmas (Clark et al 2020).

The coronavirus pandemic has posed threat to small and medium-sized businesses to come out with innovative ideas. The use of information technology in the era of the coronavirus pandemic is globally appreciable and becoming a positive concern to economics, Small and medium-sized enterprises as well as people (Radwan, 2021). This is because most things have been shifted online to control this pandemic. Small firms are profoundly influenced by the internet and modern transitions are being produced and technology is seen as an essential and successful part of business transactions (Huang, et al, 2020). It has become imperative for organizations and governments to embrace the application of computer systems in their day-to-day activities (García, et al 2017). The rate of competition among organizations, especially the

Ghana small and medium enterprises has led to each company striving to gain and retain modern technology and strategies for survival. Thus, integration of IT and innovative policy with organisational strategy has become a core topic and remains a major business concern, hence Ghana's small and medium enterprises. The SMEs of Ghana account for a significant part of economic growth and are an important driver globally and locally. The sector directly contributes about 37.4% of GDP, and 20.9% of employment in Ghana (Luftman, et al 2017).

Marketing turbulence is the peripheral circumstance which influences small and medium-size enterprise operations and improvement. These are situations that continuously and considerably vicissitudes without predictions and uncertainties. According to Diego et al (2012) market turbulence is an atmospheric situation in which consequences cannot be predicted by activity or action. He further added that small and medium-sized enterprises must position themselves favourably to attain accomplishment in market turbulence times. Market turbulence is often symbolised as a problematic way to understand and it also needs a bendable firm to counter speedily and as well as sufficient to be in competitive advantage. Market turbulence is often unpredictable and is subject to change within a period.

SMEs performance talks about the achievement of firms' goals in connection to sales, market share, profit, competition and tactical objectives. According to Chittithanwom et al (2011), firm performance is about the eagerness to attain a specific consequence as a result of the achievement of promotion goals. Yildiz et al (2014) also added that the efficiency and efficacy in conducting business activities to the achievement of a firm success is firm performance. According to Nawal and Ghadah (2020), Small firms are measured in performance in profitability, the number of employees, the market share that they possess, and the ratio of employee income.

1.2 Statement of the problem

Preliminary findings from a poll conducted by the University of International Business and Economics (UIBE) in February provided insights into the repercussions of the COVID-19 pandemic on businesses, with a particular focus on SMEs. These findings revealed that the pandemic, along with associated lockdowns and travel restrictions, had significant effects.

These included erosion of trust, anticipations of reduced sales, and issues related to cash flow (He & Wu, 2020).

SMEs contribute more than 60% to the country's Gross Domestic Product (GDP) and are responsible for 80% of all jobs (Bouey, 2020). On March 11, 2020, the World Health Organization declared the COVID-19 outbreak a global pandemic. In response, governments worldwide imposed national lockdown measures to curb the spread of the virus. This led to a significant downturn in economic activities on a global scale. The impact of these measures was felt far and wide, with international businesses witnessing substantial declines in consumption, output, and employment. Small businesses, in particular, exhibited distinct traits, such as lower production levels, a propensity for entrepreneurial endeavours, remarkable adaptability, and simple organizational structures with informal communication processes (Lazarevic-Moravcevic, 2019). However, they were also highly susceptible to economic downturns.

SMEs encountered a host of challenges in this turbulent environment, including shortages of manpower and disruptions in their supply chains. These challenges had a detrimental impact on their sales, profits, and overall operations (Gurria, 2020). Moreover, reduced consumer spending due to declining individual incomes and a sense of uncertainty exacerbated these difficulties (Gurria, 2020).

In the wake of the pandemic, the business environment experienced unprecedented levels of market turbulence. This was marked by volatile fluctuations in market dynamics, disruptions in the supply chain, and economic instability, all of which significantly impeded the ability of SMEs to operate effectively and maintain growth. Crucially, within this turbulent backdrop, the potential moderating role of firm innovativeness has become a central point of investigation. Firm innovativeness represents an organization's capacity to adapt, innovate, and implement novel strategies and technologies to navigate evolving market conditions.

The survival and growth of SMEs amid turbulence necessitate the introduction of innovative strategies in production and sales. As Nemhoglu and Mallick (2020) assert, innovation emerges as the primary strategy that SMEs can employ to enhance their performance and sustain their presence in the market. However, the unique circumstances of the COVID-19 era, characterized by constraints in resources and time, pose significant challenges for generating innovative ideas swiftly (Wenzel et al., 2021). These challenges have driven the motivation for this research study.

1.3 Research objectives

1. To examine the relationship between Covid-19 on market turbulence.
2. To assess the impact of Covid-19 pandemic on SME's performance.
3. To evaluate the moderating role of firm innovativeness on the relationship between covid19, and SMEs performance.
4. To evaluate the moderating role of firm innovativeness on the relationship between covid19, and market turbulence.

1.4 Research question

1. What is the effect of Covid-19 on market turbulence?

2. What is the effect of Covid-19 pandemic on SME's performance?
3. What is the moderating role of firm innovativeness on the relationship between covid-19, and SMEs performance?
4. What is the moderating role of firm innovativeness on the relationship between covid-19, and market turbulence?

1.5 Significance of the study

This research work will provide wonderful knowledge to small and medium-sized enterprise industry stakeholders. The study will help small and medium-sized enterprise owners to always study the market trend in order to provide innovative ideas for competition. The work will also help corporate institutions to know the importance of being innovative so as to come out with more innovative ideas to serve customers.

The study will give knowledge to the need of institute research and development department in companies for innovative programs, leads products and services. The research will aid policymakers in various industries to develop an appropriate competitive strategy for operation in sustainability. The study also enhances the present literature on the effect of the Covid-19 pandemic on market turbulence and the performance of SMEs. the moderating role of firm innovativeness. The outcome and recommendation will be of significance to the students for further research and argument.

1.6 Scope of the research

The research will be conducted with the sole usage of small firms' industry at Kasoa municipality. Respondents will be owners of small firms at the Kasoa municipality. This

research will be focused on the effect of the Covid-19 pandemic on market turbulence and the performance of SMEs. the moderating role of firm innovativeness.

1.7 Overview methodology

This study seeks to evaluate the methods that was being use to perform the descriptive beneath of the survey. It will discuss the investigation strategy, statistics sources, populace, sample magnitude and sampling methodology, study instruments, equipment confirmation, statistics scrutiny method, and statistics assortment procedures use to accumulate information. This will clarify the investigative methods used to attain the main aim being established for the study.

The study will also use the deductive research approach and quantitative research design on the effect of the Covid-19 pandemic on market turbulence and the performance of SMEs. the moderating role of firm innovativeness.

The research used convenient sampling techniques to select respondents. Likert scales questionnaire will be used to collect primary data from respondents with the use of SPSS for analysis. Primary data from questionnaires and interviews will be used for the study. Primary data will be from literary searches from journals, books and publications. Defendants will be owners of SMEs in the Kasoa municipality. While the results of the study may apply to other industries, researchers do not propose such generalizations but seek an appropriate description of the scope of its results.

1.8 Organization of the study

The organization of the study is related to the following: background of the study, description of the problem, the purpose of the study, research question, the importance of the study and scope of the study. In addition, the second chapter reviews previous works by different writers

which deal with the study field. The third section contains the method which describes in advance how information to be used for the study is to be gathered. Furthermore, the fourth chapter deals with the critical discussion and analysis of data collected during research. Finally, the fifth chapter deals with the results, inferences, and commendations of the research will be found from the fourth chapter.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The segment of this study revealed the literature related on the thesis effect of covid 19 pandemic on market turbulence and the performance of SMEs. The moderating role of firm innovativeness. This consist of literature on journals, books, articles and publication.

2.1 Covid-19 pandemic

Another viral illness is known as COVID-19 which underlies the term "Coronavirus" (Moore, 2020; Ohia, Bakarey, & Ahmad, 2020). The disease was initially discovered at Wuhan, China, before spreading over the world. Both individuals as well as pets could become infected with the virus, which results in many sorts of lung illnesses. Runny noses, sneezing, coughing, fever, sore throats, respiratory problems, etc. indicate signs of infection (Harapan et al., 2020; Ohia et al., 2020; Unhale et al., 2020). The condition is definitely contagious (Shereen, Khan, Kazmi, Bashir, & Siddique, 2020). Several infected persons have breathing disorders and have no need for medical attention to recuperating. Generally, those who are older and also have medical conditions including malignancy, diabetes, chronic bronchitis, and heart disease are becoming more unwell. Being familiar with the fatal virus, its origins, and how it develops is thus the easiest strategy to avoid and reduce overall transmission of the illness (WHO, 2020).

The main ways that the virus spreads to people are through spit drops and postnasal drip produced when an infected individual is sneezing or coughing (Harapan et al., 2020). So, it becomes imperative that people take precautions like curfews, social withdrawal, quarantines, and also advice on basic hygiene like regular hand washing, facial shield use, sneezing together into the bent elbow, etc (Ohia et al., 2020). Despite the fact that several nations and large international organizations like the WHO continue to conduct scientific evaluations to identify effective treatments. The COVID-19 virus has not yet been the target of any specific vaccinations or treatments (Shereen et al., 2020).

2.2 Market turbulence

Many other authors gave their opinion concerning turbulence in the market as a complicated phenomenon. Jaworski and Kohli (1993) asserted that market turbulence is one of the three turbulences that occur in the market space. Together they have a say in making the market flexible. Volatility of a market shows the level of turbulence in that particular market. Such changes may range from altered customer preferences, to change in customers' purchase behaviours or even industry dynamics. It is defined as the degree at which rivals compete with the company. It involves the intensity of competitive struggle that resulted between companies seeking a piece of the "market cake" and higher profits share. Jaworski and Kohli (1993) this is a concept referred to as technological turbulence, implying how fast technology alterations take place in an industry. Therefore, this simply shows its quick pace of change in business processes.

Greenley (1995) broadens the concept of the market turbulence to encompass aspects that are associated with the changes affecting marketing operations including marketing strategy and tactics among other issues that tend to shape the competitive atmosphere. Hult et al (2004) provide an inclusive perception of market turbulence that refers to ever-evolving consumer tastes, varied wants/needs with high levels of entry/exit fluctuation within markets and recurring need for new product introductions to match altering customer need. One definition for market turbulence is that it is the speed with which customers' tastes evolve (Slater & Narver, 1994). Market turbulence is included in this definition and includes dynamics of consumption demand, change of customer need, and uncertainties regarding the alteration of the market structure (Welij, 2017). This challenge constitutes that it cannot be foretold about the changing market preferences, competition, or the environmental forces. Therefore, market turbulence principle tries to consider simultaneous changes of both market dynamic and

markets as well as differentiated company approach towards adapting to new market conditions (Santos-Vijande & Alvarez-Gonzalez, 2007).

2.3 Firm innovativeness

It's indeed clear that invention is a crucial component of dominance in the marketplace. It is ingrained in a firm's management systems, tactical strategies, activities, and goods (Gunday et. al., 2011). Structural reforms, developing markets, changing consumer behaviour due to the growth of communication and the digital era, and population shifts all have a significant impact on how the sector is shaped in regard to productivity and efficiency. This circumstance may present a very severe hazard or opportunities. The capacity to innovate enables the company to innovate in a market environment that is always changing. While doing so, it mandates that all approaches, frameworks, and mechanisms that foster creativity within a company be included (Rajapathirana and Hui, 2018). Sustainable workplace characteristics are seen to be favourable factors for innovation, including vitality, technology potential, business expansion, and consumer desire for new products (Zehir and Dilek 2018).

Innovation is viewed as a sign of success for the global economy and a factor in the remarkably intense business climate. The company's forward-looking viewpoint also gives data on the industry's potential future situation (Rajapathirana and Hui, 2018). When a business has the ability to innovate, it can do so most effectively (Laforet, 2011). Regarding businesses keeping an edge over their competitors and implementing the entire strategy, innovative activity is regarded as just a priceless resource (Lawson and Samson, 2001). It is simpler for businesses to implement new facilities as well as swiftly bring new products to the market because to the firm's capacity for creativity. It is also clear that it is essential for sustaining persistent resistance. An accumulation of assets and resources might be referred to as creative actual

quality. Because of this, thriving in a constantly shifting setting necessitates a wide array of resources, possessions, and skills (Sen and Egelhoff, 2000). According to Zehir and Dilek (2018), innovative competence is the capacity to respond to industry demands for new products. This knack for reacting to competitive modern sports and unforeseen opportunities created by rivals is another definition of innovativeness. It's additionally known as such capacity to grow and embrace new goods and recent advancements to meet future requirements. Business development is discussed from several angles. The invention as either a behavioural element constitutes the initial angle element. It refers to the cost associated with implementing inventions also with help of the company. The company's desire to deal is the second viewpoint (Zehir and Dilek 2018). Corporate process innovation is said to as a tendency for an organization to engage in contemporary behaviour by Auh and Menguc (2005). Adopting new technology, developing new ideas, and putting them into practice are all considered to constitute innovativeness. The adoption of innovation is typically intended to improve the company's current effectiveness. Whether or whether a corporation innovates in response to changes in its internal or external factors, it can nevertheless evolve. Businesses adopt innovation as even the most stable settings shift throughout a period (Zehir and Dilek 2018).

2.4 Performance of SMEs

This same firm hopes to benefit from the success of little businesses as a result of the work done by every division of the company. Company efficiency is a common metric used to assess how well a company is performing in attaining its goals. When employing appropriate techniques, efficiency is the result of a firm that is utilized as a measurement tool for an artwork's overall effectiveness (Cho and Lee, 2018). The capacity for a company to execute well throughout the course of time is another way to define performance. The overall performance of a business is commonly measured using the indicators of financial performance

and non-monetary overall performance. Similarly, there are character differences in performance measurement. For example, the performance of SME commercial enterprises is measured using overall monetary performance including revenue growth, revenue transactions, earnings achieved and overall non-financial performance along with buyer satisfaction, buyer loyalty and logo value.

Financial overall performance is a company's performance visible from an economic perspective, inclusive of sales turnover of overall performance, sales transaction variety performance, and working profit overall performance (Al Mamun and Fasal, 2018). In line with Galeazz (2019); Agyabeng-Mensah and Tang (2021) economic overall performance may be measured via sales quantity, income level, income boom, savings outcome, return on stock, market share and boom in go back on investment. The degree of economic overall performance used on this observe refers to the measures taken through Negra et al. (2019), in particular looking at sales turnover, income transactions and running profit completed.

Non-economic performance is an important metric to consider when making business decisions. This type of performance is not based solely on monetary figures, but considers other areas such as innovation, customer satisfaction, and employee engagement. There are many benefits to taking a holistic approach to measuring performance, as it provides a more accurate picture of the company's overall health (Ayimey et al., 2020). Non-economic overall performance measures refer to Ghobakhloo and Azar's (2018) measures of consumer satisfaction, advantageous phrase of mouth, purchaser loyalty and brand fairness.

2.5 Theoretical framework

2.5.1 Resource-based view theory

From Wernerfelt's (1984) factor of view, the essence of the resource-based totally view theory is that firms can advantage and preserve aggressive benefit by means of creating and the usage of treasured sources and skills. Resource-based view also proposed that centre talents may be

diagnosed from firms' capabilities and resources; where in the Resource-based view, reserves besides competencies remain normally recognised as the simple structures of an idea (Barney, 1991). Furnish (1991) agreed with Barney that assets and abilities are used as fundamental inputs for the institutional procedure. Resource-based view theory of companies suggested that firms' innovativeness is a “socially complicated and imperfectly imitable useful resource that creates aggressive benefit and superior performance” (Menguc & Auh, 2006).

Resource-based view theory emphasizes firm innovativeness as a useful resource (Barney, 1991). Resource-based view literature has suggested that a company utilize its variant resources to meet purchaser wishes to benefit a sustained aggressive advantage (Tsai & Yang, 2013). This is why corporations embody innovation; in which it's far intended to deal with the effectiveness of the firm's performance, typically consistent with the Resource-based view principle (Hult et al., 2004). But, in any case, a company must change its resources occasionally based on marketplace changes as a way to keep its competitive gain (Barney, 2011). Though, these Resource-based views endorse that a firm's innovativeness can be by some means affected by certain environmental situations (Tsai & Yang, 2013).

2.5.2 The Social-ecological theory

Social-ecological theory (Bookchin, 1960) offers an information of human behavioural responses, individual, institutional, society and community coverage associated with the development of behaviour within the on-the-spot societal surroundings. The philosophy helps in spotting problems affecting conduct and also gives course for developing a success application through the social environment. Social-ecological concept emphasizes a couple of ranges of affect (inclusive of man or woman, personal, institutions, network, then community dogma) and the notion that behaviour remains fashioned and fashioned by means of the community surroundings. The attitudes of social-ecological idea are linked to the belief of

social cognitive idea, which proposes that presenting a supportive environment that results in alternate is extensive in facilitating the implementation of wholesome behaviours. With the emergence of Covid-19 separating Ghana from the rest of the sector, severe interest wishes to be paid to forming and adopting healthful behaviours which include disinfection, social distancing, movement regulations, prohibition of worship, trying out of accused, segregation, quarantine and shop cessations. The connection among concept and this observe is an in-depth knowledge of why human beings act like their mode which they do. Consequently, small and medium size enterprises which can change the manner they do things in the course of and after Covid-19 will live on and thrive.

2.5.3 Market Dynamism

Dynamics is the term used to describe the degree of ambiguity in market and business situations, comprising the generational stage and current financial efficiency. This demonstrates the need for innovation to maintain opposition for organizations in developing sectors. Several studies in the work suggest a connection between ecological vitality and creativity. (Thornhill, 2006). Excessive marketplace dynamism defines as an atmosphere in which trade takes place frequently, however the course and results of that alternate are erratic. A vigorous marketplace could move the performance of a business's behaviour. A vigorous bazaar occurs as variations inside the conduct of marketplace individuals are taken into consideration vital to society. Similarly, modifications within the conduct of rivals occur rapidly and indecisively. Modifications in client conduct are hard to are expecting. However, their wishes and expectancies from the product can exchange very without problems. In this type of marketplace, the performance of an enterprise's behaviour is based on newer facts similarly to be had facts. Due to the fact the dynamics of the marketplace can provide new and broader perspectives with a purpose to assist resolve the organization's complications and seize

novel chances. Astronomical marketplace vigour guarantees that agencies are greater touchy to ecological vicissitudes. In this situation, the commercial enterprise system turns into more green with the help of new information (Ikhsan et. al., 2017).

Tactical control contemplates the surroundings being a significant contextual thing through a sturdy impact on the organisation's planned course. In addition, the method literature helps the view that both commercial enterprise proprietors and executives have to address the impact of the surroundings (Li and Simerly, 1998).

For example, Gatignon and Xuereb (1997) found that under conditions of high market dynamism, firms become more focused on technological trends, and the relationship between technological orientation and business success strengthens. Similarly, Lumpkin and Dess (2001) reported that innovation orientation is more closely associated with business success in the context of increased dynamism, and that the relationship between propensity to innovate and performance is stronger when the level of dynamism is higher (Cadogan et. Al., 2009). Our speculation from those concerns is that marketplace vigour has a nice effect on company innovativeness. Similarly, innovativeness is likewise anticipated to be a high-quality reflection of company performance.

2.6 Hypothesis development

2.6.1 Covid-19 and market turbulence

The influence of the ailment on society and the economic system may be seen from the lockdown of towns around the arena, restrictions on exertions mobility, journey bans, suspension of air tour and above all of the strike of the economy. The COVID-19 crisis unfolds global from February 21 to March 24, 2020, and the variety of instances is still increasing unexpectedly each day. The outbreak of COVID-19 is predicted to have main implications for the worldwide market situation (word economic, 2020). Due to the worldwide outbreak of

COVID-19, the worldwide intake pattern is probable to be affected between twenty to three percent and four to eight percent (ADB, 2020). Further, it has also been predicted that the modern pandemic might also cause a 5-15% reduction in global FDI. Furthermore, consistent with the UNCTAD document, the arena wishes an aid bundle of up to 2. Five trillion dollars to deal with the damage (UNCTAD, 2020).

Growing market turbulence involves extended dispersion of key market variables over the years and improved unpredictability of alternate (grant & Cibin, 1995). While corporations ought to address an excessive stage of complexity, which means that that there are many firms competing in the market, companies are greater inclined to make external acquisition decisions to deal with the excessive depth of rivalry (Chen & Lin, 2004).

Corporations will adopt a more bendy approach during the covid-19 pandemic, when environmental changes are greater unpredictable (Chen & Lin, 2004). While marketplace turbulence is high, companies do not ought to splurge to spend time growing their improvements. For example, within the first degree of knowledge development, it isn't always sure whether there could be sufficient demand in the marketplace. Handiest when market needs emerge as clear can corporations have interaction in inner development (Chen & Lin, 2004).

Agencies would want fast innovation that they may engage with inside their commercial enterprise. Therefore, the marketplace turbulence would be better and thus tend towards the external market in comparison to the internal marketplace. From the literature, it can be hypothesized that:

H1 covid-19 has positive effect on market turbulence

2.6.2 Covid-19 pandemic and SME performance

The lethal sickness (COVID-19) has unfolded almost anywhere in the global at an extraordinary degree. Governments aren't sure whilst the virus will disappear and infections

will decline. In order to counter the spread of the virus, many countries have locked down all or a part of the world so that it will save citizens from the unfold of the virus. Therefore, due to the lockdown, commercial enterprise and economic activities have been affected and weakened the available human and financial sources including people, cloth, transportation, and others (Craven, Liu, Mysore, & Wilson, 2020). This precipitated many organizations to shut down and affected their performance besides. Lockdowns, movement restrictions, marketplace closures and social distancing, as introduced by the authorities, have additionally constrained the movement of goods and services that are the spine that SMEs rely on for his or her easy recurring operations.

Small and medium-sized enterprises, together with their personnel, are a necessary part of the social and financial structures of regular lifestyles global. This vital function played via Small and medium-size enterprise is now facing threats from the incomparable results of the coronavirus. Clients, as well as intermediaries of Small and medium-size enterprise are exposed to the chance of commercial enterprise failure because of the recession that has handed global (Wuen and Wu, 2020). But, in such situations, controlling the virus, keeping employees' wages, reducing lengthy-term prices and the fees of stopping business collapse are vitally essential, which the government ought to do. Therefore, extreme motion with nicely-described programs and donations is urgently wished for the above purpose (Weiwen, Karen, & Luedi, 2020). Consequently, to win the combat against the pandemic and repair peace within the enterprise community, everyone should make sure that the contamination is reduced to the bare minimal via adopting regulatory measures from the fitness government. Individuals have to be aware of the fast-term effect of the pandemic on the gadget. Reliable micro and macro measures must also be supported by using powerful control tools from the relevant government worried (Enterprise, 2020).

Many economists have expected that there will be large unavoidable financial fees, with a spike in public debt had to cover a key part of the revenue losses because of the COVID-19 pandemic. Therefore, the main mission is to contain a large pandemic that would bring about a protracted term global recession. Despite the fact that the economic coverage makes a huge contribution and a concrete, coordinated and strategy that includes economic and economic sector policy as well as the involvement of commercial banks will become a stimulus bundle for small and medium establishments to upward thrust again. Despite the fact that the monetary area suffered a disaster with severe capital wishes, it turned into due to excessive stages of public and private debt (Frank, 2020). For a micro monetary unit including small and medium businesses, micro credit incentive is needed via micro finance establishments with defining goals, but supervision and guide need to function the important thing to economic establishments. Assisting agencies to preserve their personnel is crucial. Aid inside the shape of grants for the fee of wages, education and development, product innovation and new manufacturing system can for this reason help prevent downsizing of organizations. Inner evaluation packages can help companies apprehend the inner environment and relate greater successfully to production and enterprise connections (Matt, 2020). Base on the literature reviewed above, it can be hypothesized that:

H2 covid-19 pandemic has negative effect on SME performance

2.6.3 Firm innovativeness on the connection amid covid-19, and SMEs performance

A company's innovativeness is set a company's receptiveness and tendency to accept novel thoughts that result in the development and release of a brand-new product. The literature has confirmed how a company's innovativeness property and movements make contributions to company performance (Chandy 2009).

Innovation is considered a especially competitive marketplace environment and a element inside the achievement of the global financial system. The progressive perspective of the firm additionally affords facts approximately the future market position (Rajapathirana and Hui,

2018). Innovation can simply arise if the firm has innovation potential (Laforet, 2011). Progressive functionality is taken into consideration a precious asset for businesses to preserve aggressive advantage and to enforce average approach (Lawson and Samson, 2001). A firm's capability to invent makes it less complicated for companies to speedily deliver new merchandise to marketplace and undertake novel techniques. This is similarly taken into consideration a vital component to sell ongoing competition. Modern overall performance may be defined as an aggregate of assets and assets. For that reason, an extensive range of assets, belongings and competencies are needed to accomplish achievement in a speedily fluctuating atmosphere (Sen and Egelhoff, 2000). As Adler and Shenbar (1990) have noted, modern organizations need to be able to respond quickly to new market demands. This means having the ability to develop new products and technologies, as well as the capacity to adapt and improve existing ones. In other words, they need to be able to respond to both planned and unplanned changes in the market.

The agency's improvements are offered from distinct perspectives. The first element is innovation as a behavioural aspect. That is, the rate of adoption of the innovation by means of the firm. The second perspective is the agency's willingness to trade (Calantone et al., 2002). Auh and Menguc (2005) consult with firm innovativeness as the tendency of an organization to engage in revolutionary behaviour.

This covid-19 pandemic has come with diverse challenges which have led to lockdowns, social distancing, market proximity, task losses and commercial enterprise closures for a time frame. The coronavirus pandemic poses a hazard to SMEs to give you innovative ideas. The usage of facts era within the era of the coronavirus pandemic is globally favoured and becomes a nice hobby of the economic system, small and medium-sized organisations and those (Radwan, 2021). This is due to the fact most things had been moved on-line to control this pandemic. Small and medium-sized businesses are deeply stricken by the net and cutting-edge transitions

are underway, and generation is taken into consideration a vital and a hit a part of commercial enterprise transactions (Huang, et al, 2020). It has end up imperative for agencies and governments to embody using computer systems of their everyday sports (García, et al 2017). The level of competition amongst organizations, especially Ghanaian SMEs, has led to every business enterprise suffering to accumulate and preserve present day technologies and techniques for survival.

Consistent with Hamiza (2020), covid-19 restrictions have an extensive wonderful impact at the overall performance of SMEs. In a paper by Ozili and Arun (2020), they discovered that increasing closed days, economic coverage choices and global transportable regulations have a substantial positive impact on the performance of SMEs. The findings in addition imply that restrictions on internal movement and better spending on financial policy did not have a positive impact on SME performance.

Correspondingly, Abideen (2020) looked at how the coronavirus (COVID-19) affects small and medium firms. the end result of the take a look at revealed that each one sub-variables of COVID-19 consisting of lockdown, motion regulations and global tour restrictions. Have a considerable terrible relationship with SME performance.

Problems in enterprise are complicated, affecting each brief-time period and long-time period performance if now not addressed immediately (Ansell and Boin 2019). Consistent with Hamilton (2020), when crises exist, corporations which include SMEs must be revolutionary to face the turbulence. Small and medium size enterprises are a modern useful resource in maintaining market turbulences which includes the Covid-19 pandemic (Gupta 2020). In keeping with Disosky (2020), crisis situations consisting of Covid-19 have a non-constructive effect at the preference of SMEs to be revolutionary. Maximum countries at the continent have provided extraordinary measures in reaction to covid-19 with different control dogmas (Clark et al 2020). Based on the empirical study above, it can be hypothesized that:

H3 Firm innovativeness has a positive moderating effect on covid-19 and SME performance

2.6.4 Firm innovativeness on the connection amid covid-19, and market turbulence.

Revolutionary products and services can assist corporations meet the ever-changing wishes and demands of customers (Sok et al., 2016). The covid-19 pandemic has added approximately a change in enterprise around the sector. As mentioned with the aid of Inventory (2011), innovating firms can sign their capacity to satisfy present day and future consumer needs, and revolutionary merchandise growth anticipated software and consumer pleasure within the technology of COVID-19. Expanded expected software associated with innovation has a positive effect on converting consumer attitudes. However, greater product or service innovation can definitely affect SMEs to fulfil consumer demand in instances of turbulence. Customers may be beaten and discouraged by way of the complexity of latest products or services, which may be too worrying for them (Calantone et al., 2006). The dearth of records approximately new products and the greater number and kind of revolutionary merchandise presented can cause a boom in patron uncertainty approximately the company's capability to meet their desires and a lower in client delight (stock, 2011).

Marketing turbulence is a marginal situation that affects the operation and improvement of small and medium-sized corporations. These are conditions that alternate continuously and significantly without predictions and uncertainties. In keeping with Diego et al (2012), market turbulence is an atmospheric situation wherein the effects of sports or actions can't be expected. He in addition added that SMEs should be nicely positioned to succeed in instances of market turbulence. Turbulences in the market are regularly symbolized as a tricky manner to recognize them and also want a bendy firm that can face them quick and on the same time enough to be

in an aggressive advantage. Marketplace turbulence is regularly unpredictable and may exchange over time.

Market turbulence refers to a situation where all economic and business operations are disrupted, whether or not by governments or personal corporations, which often influences deliver and demand chains and can reason main financial problem (Senbeto and Hon, 2020). It represents a kingdom of excessive weakness inside the ability of markets to respond to modifications and regularly takes place due to an unexpected event or organization of crises that harm the economic system in preferred (Wang et al., 2015). Companies are below terrific strain while markets revel in turbulence, instability or unexpected changes in operations (Tsai and Yang, 2013). In lots of cases, companies may also resort to taking measures to help repair the stableness of markets, their applications and plans, however the effectiveness of those measures is regularly restricted (Cortez and Johnston, 2020). A length of disaster along with the unfold of the 2020 coronavirus can pressure agencies and governments to make brief choices and go through heavy losses (Dwivedi et al., 2020). The 2020 pandemic had a big impact on markets all over the world; the decrease in demand and lack of manufacturing activity had a huge effect on demand for goods, and in 2020 many researchers predicted that demand for manufactured goods could be at its lowest level in years. (Michail and Melas, 2020).

A turbulent market is characterized via fast and unplanned adjustments that have an effect on customers' questioning and alternate their priorities (Senbeto and Hon, 2020). Companies put lots of attempt into analysing the future and looking forward to the modifications which could occur in the markets a good way to prepare for the alternate and avoid losses (Kachouie et al., 2018). As a result, we discover groups seeking to capitalize on their human capital, which can be the simplest method to face crises and marketplace turbulence. Human capital consists of questioning and the competencies to investigate the cutting-edge situation with the aid of

analysing the beyond, understanding the prevailing and waiting for the destiny (Horchani and Zouaoui, 2021).

The relationship among marketplace turbulence and covid-19 has been studied by using a number of researchers, along with Larbi-Siawa et al. (2022), which centred on environmental innovations and their impact on commercial enterprise overall performance. Marketplace turbulence has been found to boom the nice impact of eco-innovation of products and agencies at the covid-19 pandemic. Further, Cheng et al. (2021) investigated the effect of inexperienced innovation practices on company overall performance under marketplace turbulence. Marketplace turbulence turned into located to be worried in enhancing the fine effect of ecoorganizational innovation on the covid-19 pandemic.

In a related observe, Iqbal et al. (2021) found that marketplace turbulence had a significant impact on the relationship among innovation and the covid-19 pandemic. Different related research consists of those of Rhee et al. (2020) who adopted -wave panel facts in South Korean production companies to look at the relationship among excessive-performance work practices and organizational innovation with market turbulence. There was a high-quality and large association between the 2 variables, which was strengthened by using the introduction of high marketplace turbulence. Additionally, they found that market turbulence had a big impact on the relationship among sustainable management and frugal innovation. In keeping with Hamilton (2020), within the presence of crises such as the covid-19 pandemic, companies together with SMEs must be modern if you want to face the turbulence. SMEs are a revolutionary resource in sustaining market turbulences such as the Covid-19 pandemic (Gupta 2020). In keeping with Disosky (2020), disaster situations which includes Covid-19 have a non-optimistic impact on the choice of SMEs to be revolutionary.

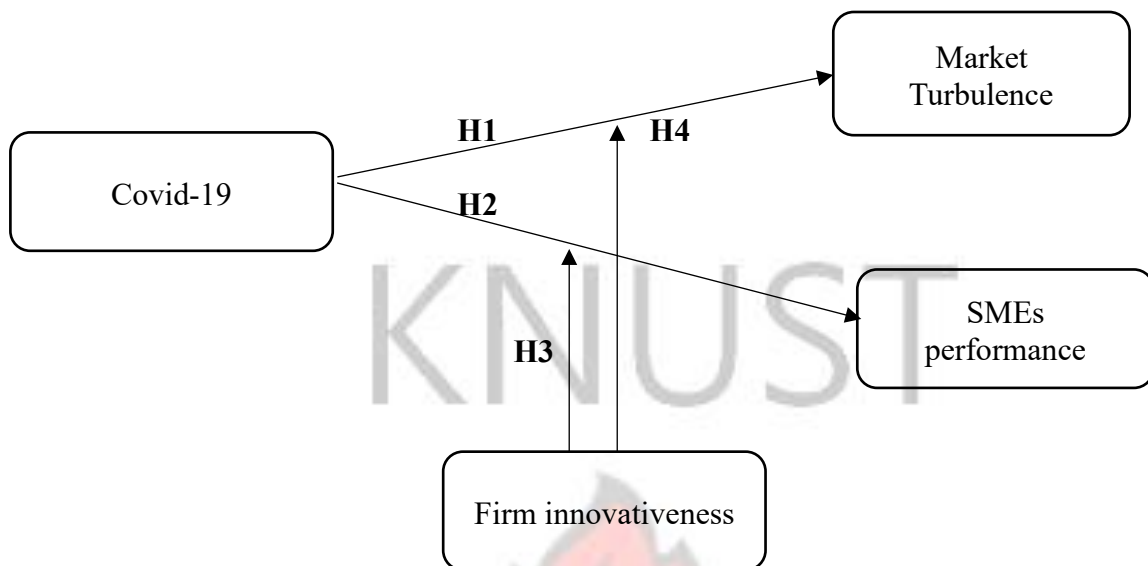
According to a report via the international financial Fund, the arena is experiencing a recession in 2020. Due to the covid-19 pandemic, enterprise sectors inclusive of journey, lodging and

food offerings are feeling the pain extra than other industries. In preferred, agencies went via numerous phases of melancholy before recuperating (Matt, 2020). The severity and harm caused by each section depends on the measures taken by the diverse governments. The impact turned into intense and the period of the pandemic changed into unknown. For companies visiting from closure to recuperation. SMEs are experiencing a combination of threats in the procedure of surviving the results of the pandemic.

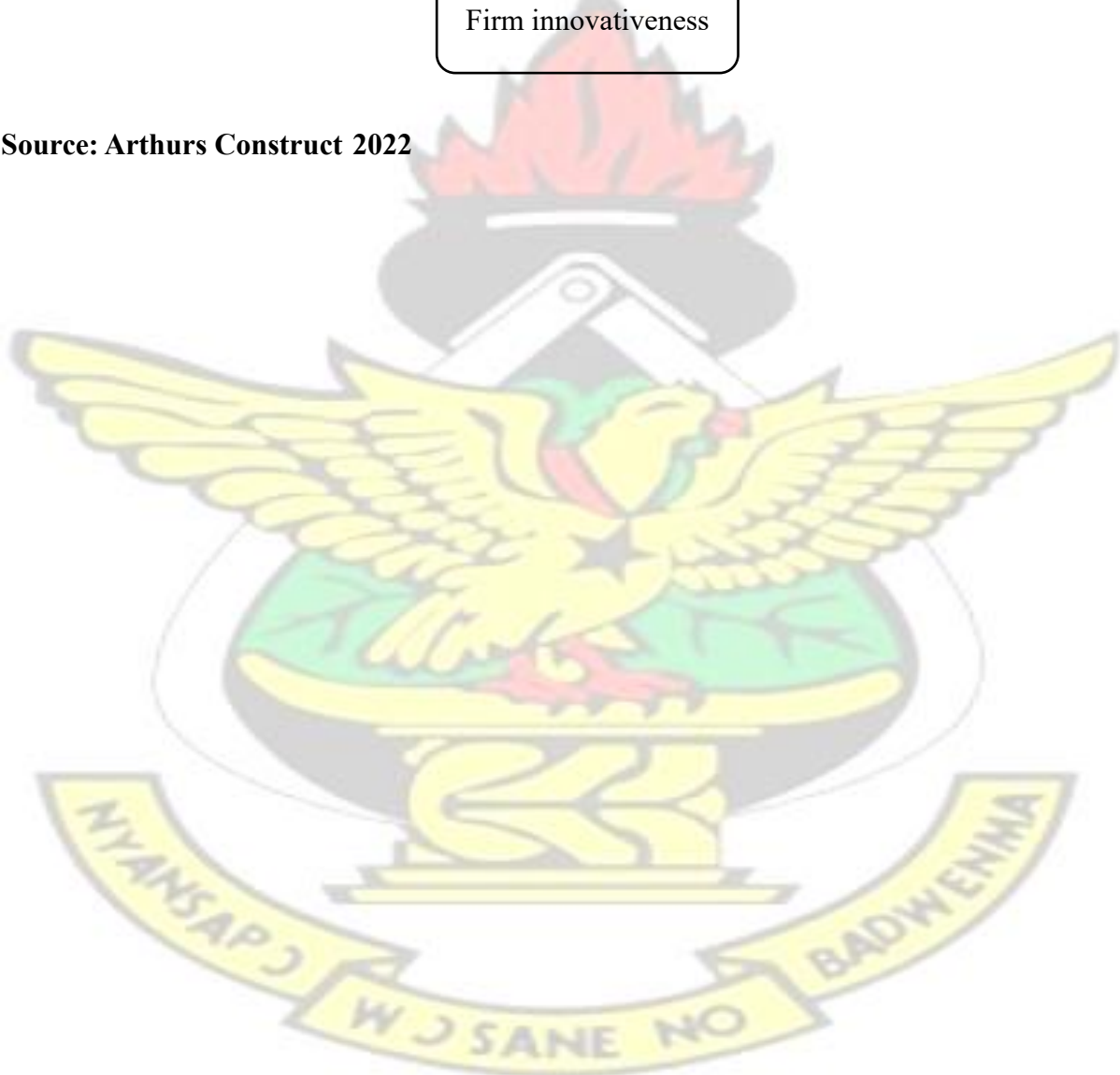
Call for items and services increased and maximum businesses commenced to expose signs of liquidity problems due to the trouble of cash reserves of SMEs. Hence, any liquidity problem on this region of the financial system will result in the liquidation of many other large agencies. International groups had been especially susceptible because of the lack people greenbacks for their transactions (Wuen and Wu, 2020). For SMEs engaged in production sports, operations during the lockdown. Base on the empirical evidence above, it can be hypothesised that: ***H4***

Firm innovativeness has a positive moderating effect on covid-19 and market turbulence

2.7 Conceptual framework



Source: Arthurs Construct 2022



CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The current section outlines techniques used to attain the objectives of the research. It explains the method used, which answers questions about the populace length, sample length and statistics series procedure. The main sections encompass research paradigm, research design, sampling design, method of data collection, questionnaire design, data analysis and ethical concerns

3.1 Research philosophy

A studies paradigm motivates the investigator's primary philosophies of examination, it's miles “a hard and fast of associated assumptions approximately the arena it truly is shared with the useful resource of a community of scientists investigating that worldwide” (Deshpandé, 1983) and acts as “a criterion for choosing difficulties that can be assumed to have answers” (Kuhn, 1996).

The positivist paradigm presumes that there is one objective reality that is measurable and understandable. In contrast, the postmodernist paradigm considers reality to be socially constructed and interpreted by people based on their participation in events. Interpretivist paradigms are commonly associated with deeply exploring, richly describing, and holistically understanding a phenomenon in detail. In contrast, the positivist paradigm forms the concept of medical tradition and underlies most experimental and quantitative research methods. At the same time as the philosophy of a research is positivism, we assume that the researcher is impartial of and neither impacts nor is tormented by the priority of the studies. Selecting a studies method is normally based on (a) the researcher's view of fact (ontology), for the reason that this affects the selection of studies approach (Chung & Alagaratnam, 2001); and then the necessities restricting from the important research question and the goals of the studies (Stake, 1994; Yin, 2003).

The current Covid 19 pandemic has caused marketplace turbulence and impacted the overall performance of SMEs. Firm innovativeness has been found to play a moderating role in this situation (Peters & Fletcher, 2004; Reinartz et al., 2004; Rosenbaum & Huang, 2002). Postmodernist paradigms, which are more subjective in nature, may be more appropriate for this type of research than positivist paradigms, which focus on measurement and objectivity (Perry, Riege, & Brown, 1999). While the studies display the standards of positivism, working with an observable social fact is favoured and the quite fabricated from such studies can be law like generalizations similar to the artwork of physical and natural scientist. In interest of the goals of the have a look at and the phenomenon itself, a positivist paradigm was decreed.

3.2 Research design

In line with Saunders, et a., (2008), a study design is a managed plan of a study wherein the gathering method and approaches for analysing the facts to be gathered are targeted. Cassel and Simon (2004) argued that a study's design is an argument for the logical steps to be able to be taken to link research questions and troubles with statistics collection, evaluation and interpretation in a coherent manner. There are numerous study designs recommended by teachers, the study design used in this study is a explanatory research approach. This allows implicit and expressed theories to be tested. This study was designed as a case take look that centres on how and when the effect of covid 19 pandemic on market turbulence and the performance of SMEs. The moderating role of firm innovativeness. The questions raised in the research were expressed through the collection and evaluation of records from the sector.

3.4 Research approach

According to Jebreen (2012), a research method is a technique of commentary that is planned and a machine that includes the steps of primary assumptions to the chosen technique to

amassing, analysing and deciphering information. It's far a long way from absolutely primarily based on the nature of the studied problems that are being solved. Jebreen (2012) said that the method of research is basically divided into the approach of data series and the technique of analysis. "The researcher accumulated a person, this is, he makes a uniqueness of one concept, brings non-public cost to study it, observes the context or environment of the player, verifies the correctness of the findings, interprets the statistics, creates a changing schedule and works with the player, perceives the variables, relates the variables, opinions and quantifies data, uses an unbiased approach, uses a statistical system, and collects quantitative statistics.

An discovered approach that came for use for examine purposes changed into the deductive research approach. In step with this approach, researchers interpret using statistical evaluation to make connections among what is understood and what can be ascertained via research (Trochim 2000). The deductive approach is famous as it allows researchers to extend the theoretical framework and examine it via last a particular stop (Soiferman 2010). Closed questions were used to decide numerical statistics".

3.5 Population of the study

In line with (Malhotra 2010), the population of a study refers to the collection of items or factors that have the statistics the researcher seeks and with which references are made. Burns & Bush (2000) also explain population because the whole organization underneath observe by using the researcher as indicated with the aid of the targets of the observe.

The population of study were the owners of small and medium size enterprises in Kasoa of the Awutu Senya East municipality. This encompass 15562 owners in distinct Small and medium length enterprise from special sectors in Kasoa municipality. Primarily established on the studies questions, the researcher has especially selected the small and medium enterprise employers in Kasoa of the Awutu Senya East municipality due to its reputation, involvement

in the SMEs zone. Most importantly, their region which provide the researcher instances of get right of entry to the owners.

3.6 Sample size and sampling techniques

Sample is tense with the selection of a number of instances or participants from in the population to estimate characteristics of the complete population Burns & Bush (2000). In step with Zickmund (2013) the researchers typically cannot make direct annotations of every individual inside the populace they may be reading. The researcher collect data from a subset of individuals (a sample) and use those annotations to make inferences about the entire population. Base on krejcie and morgan (1970) statistical formula, the sample size is 375 of small and medium size enterprises owners.

According to Burns et al (2013) sampling is a process of selecting a group of people, events or behaviour when conducting a research study. Mostly it is impossible or awkward to study the entire population in the research work therefore need a representative component. From Saunder et al (2009) sample method are population cutback tools use to restrict data collection to a subgroup of the population while is impossible to gather data from the entire population. Sampling methods consist of probability and non-probability (Saunder et al 2009). According to Saunder et al (2009) probability sampling technique has the chance of each member or unit being selected from the population for the study whiles the non-probability sampling technique the chance of selecting from the population is unknown. The sampling procedure selected was the convenient sampling technique being a non-probability sampling technique.

The justification for this turned into from Saunders et al, (2007). In step with him the sample size for non-opportunity sampling in enterprise studies is reliant on the studies questions and studies intentions in specific. It's far consequently the logical connection among the sample

selection technique and the purpose and recognition of the research that is essential, generalization being made to idea instead of populace.

3.7 Data collection procedure

Given that these devices are so widespread and that accurate records are so desired, this study adopted a descriptive survey design, which is based on a large, representative sample and accurately portrays a profile of individuals, events, or conditions (Saunders et. al., 2015). The cross-sectional descriptive survey was found to be most appropriate. Empirical data were collected at only one point in time from different types of respondent samples (Malhotra 2010). In order to get information from respondents, self-administered questionnaires were used. It took about one week to get all the records from the series. While doing this, ethical problems were taken into consideration, specifically with the informed consent approach and participants' confidentiality (Malhotra 2010).

3.7.1 Sources of data

These studies take a look at attracts its facts from handiest number one information sources. The number one statistics resource talk to statistics amassed and analysed with the aid of the researcher from the field. The principle primary records for the observe become the responses acquired from respondents thru questionnaires (Trochim 2000). The information acquired from those resources became scrutinized for suitability, reliability, adequacy and accuracy. The researcher used primary source records series, each standardized questionnaires and interview courses have been used. Although the standardized questionnaire changed into used to get answers, 'and unbiased opinion. The interviews had been used to explain certain unresolved

troubles. Such units of facts collection make it quite smooth for contributors to have the info required for the study.

3.7.2 Measurement instrument

A survey instrument was developed to test the research model. The researcher used a selfadministered questionnaire distributed to the owners of small and medium size enterprises in kaso in the Awutu Senya East municipality. Although some respondents may be biased in answering the questions in the attempt to keep privacy, others may misunderstand the questions asked and give wrong feedback. A questionnaire was used due to the size of the sample population, which spreads over a large territory, it is economical and the best method of collecting information, it also put less pressure on the respondents for an immediate response (Manfreda, et al., 2002). The questionnaire comprises two segments. The initial segment includes the items related to demographic measurement. This segment consists of the items that captured general information about the respondents such as gender, age, position, educational background, and number years with firm. This part of the questionnaire was designed using the interval scale. The demographics provided a better understanding of the responses from the respondents.

In the second part, questions are related to covid 19 pandemic on market turbulence and the performance of SMEs. The moderating role of firm innovativeness. The study used four sets of questionnaires: (1) covid-19 from Gusti et al., (2022) which is a 12-item scale. (2) Market turbulence adapted from Moustafa et al., (2022) a 6-item scale. (3) SME's performance adapted from Nagwan (2021) a 6-item scale and (5) Firm innovativeness adopted from Arokiasamy et al (2021) a 5-item scale. This part of the questionnaire was designed by using a seven-point

Likert scale (1 = Strongly Disagree 4 = Neutral 7 = Strongly Agree).

Table 3.1 Measurement items

Construct	Number of Items	Source
Covid-19 pandemic	12	Gusti et al., (2022)
Market turbulence	6	Moustafa et al., (2022)
SME's performance	6	Nagwan (2021)
Firm innovativeness	5	Arokiasamy et al (2021)

3.7.3 Pilot test

It is important to have an affordable respondent that accurately represents the target population of the survey questionnaire (Cavana, Delahale & Sekaran, 2001). The purpose of a pilot check is to provide reliable information about the sample by identifying weaknesses in the design and instrumentation of the survey questionnaire (Cooper et al., 2006). The main goal of administering a Pilot test is to ensure that there were no misunderstandings of the questionnaire items by respondents and also to determine whether all items are reliable or not. 45 questionnaires were distributed for the Pilot test and collected from the respondents for analysing the reliability of items.

3.7.4 Data Collection

According to (Bhat 2019), data collection is a system of amassing, measuring and studying correct intelligence for studies with the use of a widespread proven tool. Data collection is also the process of amassing and measuring statistics from diverse resources to get an entire and correct image of an area of interest (Nair 2018). Information series helps in getting the results

and additionally facilitates the researcher to assess the hypothesis base at the accrued data. The primary source of information was a survey. The field survey became finished the use of a closed established questionnaire. Essential data gathered from capricious literature for this study. The primary records collection tool that become used is a based questionnaire.

The structured questionnaire consists of more closed ended questions, which the respondent chooses from, coupled with some Likert scale questions to find out the effect of covid 19 pandemic on market turbulence and the performance of SMEs. The moderating role of firm innovativeness. The questionnaire was designed and distributed to owners of small and medium size enterprises in kaso.

The questionnaire contains two segments. The initial segment comprises the items related to demographic measurement. This segment contains the items that captured general information about the respondents such as gender, age, and educational background of respondent. This segment of the questionnaire was designed using the interval scale. The demographics provided a better understanding of the responses from the respondents.

In the succeeding portion, questions are related to covid 19 pandemic on market turbulence and the performance of SMEs. The moderating role of firm innovativeness. The study used four sets of questionnaires: covid-19 which is a 12-item scale, Market turbulence a 6-item scale, SME's performance a 6-item scale and Firm innovativeness a 5-item scale. This part of the questionnaire was designed by using a seven-point Likert scale (1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree).

The researcher used questionnaire due to its suitability for understudy on the studies challenge. Likewise, it within reason easy to deal with, simple to interpret and primarily capable of extracting answers useful for records processing.

3.8 Reliability and validity

Validity defines how well the examination evaluates what it has changed into, or how accurate the assessment findings are. It's usually evaluated relevance by asking branching questions and transformed into an additional search for solutions in the study of others (Joppe, 2000). Joppe (2000) additionally defined reliability as "The degree to which the findings are stable over years and the consistency of the entire population under analysis, and if the results of the test can be replicated using the chosen approach, then the study device is reliable." Through this document, I will clearly state that the expertise gained through the assessment is correct and applicable for further studies.

3.9 Data analysis

The analysis of the records become finished the usage of the Statistical bundle for Social technology (SPSS) model 23.0 statistical device. The SPSS required the facts collected to be numerically coded. Numerical codes were assigned to most people of query prior to the management of the questionnaire. The authors accompanied 4 key tactics in analysing the statistics. First of all, the questionnaires had been screened and the appropriate ones had been entered into the databases. Questionnaires from respondents who had spent much less than six months and non-everlasting business enterprise have been no longer blanketed in the final dataset because they own little knowledge about the business enterprise and might cause wrong evaluation. Secondly, the consistency and balance of the information have been tested by way of calculating the coefficient of the fractal measurement the use of SPSS software. Thirdly, I hooked up the authenticity and relevance of the construct validity of the scales by way of carrying out confirmatory factor analyses (CFA). Finally, but importantly, the hypotheses have been tested for direct relationships the use of multiple linear regression techniques.

3.10 Ethical considerations

Moral concerns are significantly taken into consideration whilst carrying out a social technological know-how research study. It's miles broadly referred to as the appropriateness of the behaviour of researchers with regards to the rights of those who are the topics of the studies project (Alston and Bowles, 2019). The moral issues of voluntary participation, informed consent, danger of harm, confidentiality and anonymity are primary and need to be considered by researchers when accomplishing any have a look at in a social technological know-how context (Tracy, 2019). The researcher consequently taken into consideration and accompanied all ethical requirements at some stage in the route of this research (Malhotra and Birks 2010). The researcher took steps to make sure that no player in this research work become harmed in any way. The researcher tried to keep away from contacting respondents at the blind side of supervisors. The researcher sought permission and communicated the goals and targets of the look at to each groups and respondents thru introductory letters and cover letters. The respondents were also assured that the facts accumulated changed into most effective used for instructional research to fulfil the Masters necessities and no longer for another questionable use. An informed consent assertion become provided at the start of the questionnaire, informing participants that completing the survey assumed their consent.

3.11 Limitation of the research

Research being applied or basic research poses a limitation. The time given out to conduct the research provide a restriction to the researcher. Financing is a major problem in this era and this also poses a constraint to the researcher. The study is a case study approach in which the outcome cannot be used for a generalisation. Stakeholders in the small and medium-sized enterprises industry's willingness to provide accurate data also give constriction the research.

The researcher is using non-probability sampling for a quantitative research and this also pose a limitation.

KNUST



CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATIONS

4.0 Introduction

The work's findings are presented in this section. The data includes descriptive statistics like mean, standard deviation, minimum and maximum. Moreover, it displays the validity and dependability through the use of confirmatory factor analysis (CFA), exploratory factor analysis (EFA), average variance extracted (AVE), inter-factor correlations, and composite reliability (CR). The tests for multi-collinearity and model fitness were then given. The preliminary analysis serves as the initial stage in reviewing the data to find any potential flaws that, if neglected, might affect the validity of the findings. In addition, it offers a preliminary defence of the study's hypothesized linkages.

4.1 Response Rate

A total of 400 questionnaires were distributed to employees of SMEs in Kasoa, Ghana. The questionnaires were administered with the assistance of the relationship officers and relationship managers. At the end of the two weeks, only 389 employees had filled the questionnaires. 14 questionnaires were discarded because they had spent less than six months in the various SMEs which could make it difficult for them to answer the questions well. Therefore, 93.8% of the questionnaire was used for the analysis. The overall response rate is considered quite high when compared to similar researches. This is showed in table 4.1.

Table 4.1: Response Rate

Item	Total	Percentage
Questionnaire distributed	400	100

Filled questionnaires	389	97.3
Usable questionnaires	375	93.8
Discarded questionnaires	14	3.5
Unfilled questionnaires	11	2.8

Source: Field survey 2023

4.2 Demographic of the Respondents

The researcher used the SPSS version 24 to analyse the demographic characteristics of the respondents. The results are demonstrated on table 4.2

Table 4.2 Demographic of the respondents

Variable	Item	Frequency	Percentage
Sex	Male	208	55.5
	Female	167	44.5
Age of respondents	Less than 20years	41	10.9
	20-29 years	97	25.9
	30-39 years	140	37.3
	40 and above	97	25.9
Position of respondents	Branch manager	86	22.9
	Founder	229	61.1
	Shop attendant	18	4.8
	Sales executive	42	11.2
Number of years with firm	1-3 years	19	5.1
	4-7 years	53	14.1
	8-11 years	187	49.9
	Above 12 years	116	30.9

Source: Field survey 2023

4.2.1 Sex of respondents

Table 4.2 demonstrate the analysis of sex of the respondents in the research. The outcome revealed that, 208 out of the 375 respondents were males. This represent 55.5 percent. Whiles 167 out of the 375 respondents were females. This pose a percentage of 44.5.

4.2.2 Age of respondents

The researcher also analysed the age of the respondent using the SPSS version 24. The results are showed in table 4.2. From the analysis, it is showed that 41 of the respondents were having the age group less than 20. This provided a percentage of 10.9. Again, 97 of the respondents were from the age group 20-29 giving a percentage of 25.9. The age bracket 30-39 had 140 respondents with a percentage of 37.3. Whiles, the age group 40 years and above had 97 respondents providing a percentage of 25.9.

4.2.3 Position of respondents

The result of position on the respondents is showed in table 4.2. After careful analyses of the data given by respondent on their position held in each establishment, it was revealed that 86 of the respondents were branch managers. This gave a percentage of 22.9. Again, founder had 229 responses with a percentage of 61.1. Moreover, shop attendants had 18 responses giving a percentage of 4.8 whiles sales executive had 42 responses providing a percentage of 11.2.

4.2.4 Number of years with firm

Table 4.2 showed analysis of the number of years respondents have worked with their firm. From the analysis, it is showed that 19 respondents have work with their firm from 1-3 years with a percentage of 5.1. Again, 53 respondents have work with their firm within 4-7 years.

This provided a percentage of 14.1. Moreover, 187 respondents have work with their firm within the period 8-11 years given a percentage of 49.9 while 116 of the respondents have work with their firm above 12 years.

4.3 Validity of the constructs

The consistency, stability, and reproducibility of measurement results are concerned with reliability. Conforming to Field (2009), a scale should consistently represent the construct it is measuring in the reliability calculation. Beside using the coefficient alpha (Cronbach's alpha), the internal accuracy and consistency of the scales is also calculated. Theoretically, Cronbach alpha looks at inter-relationships between the objects intended to measure a construct. According to Field (2009), an appropriate value is the Cronbach alpha with a value between 0.7 and 0.8; values significantly lower imply an inaccurate scale. In the same way, Hair, et al. (2010) postulate that for most research purposes, a coefficient alpha greater than 0.7 is highly satisfactory.

Nonetheless, in the early phase of the analysis, Nunnally (1978) argue that a coefficient alpha of 0.5 to 0.6 was satisfactory. The researcher adopted a positivist model of analysis for this research study, which is an appropriate way to collect data for defined variables of interest. The investigator designed the survey instrument to gather data from the employers, and employees of the SMEs in Kasoa. In this analysis, with the aid of Cronbach's alpha, the investigator assessed internal reliability. From the analyses, the intramural dependability coefficient of Covid-19 pandemic was .716, Market turbulence was .719, SMEs performance was .736 while Firm innovativeness was .730. covid-19 pandemic, market turbulence, SMEs performance and firm innovativeness were. The outcome that the data produced consider suitable for progress analysis and data can conceivably be used to achieve the stipulated study purposes. In conclusion there was no validity test. This is showed in table 4.3

Table 4.3 Reliability (Cronbach alpha)

Construct	Number of Items	Cronbach alpha
Covid-19	12	.716
Market Turbulence	6	.719
SMEs Performance	6	.736
Firm Innovativeness	5	.730

Source: Field survey 2023

4.4 Correlation metrix

From table (4.4), Covid-19 had a correlation coefficient of .646 with itself however a correlation coefficient of .683, -.299 and .219 alongside market turbulence, SME performance and firm innovativeness respectively. Market turbulence also had a correlation coefficient of .771 nevertheless a correlation coefficient of .683, .004 and .468 with covid-19, SMEs performance and Firm innovativeness respectively. SMEs performance also had a correlation coefficient of .552 by itself but a correlation coefficient of -.299, -.004 and .173 with covid-19 pandemic, market turbulence and firm innovativeness correspondingly. Firm innovativeness has correlation coefficient of .689 itself to correlation coefficient of .219, .468 and .173 to covid-19, market turbulence and SME performance respectively. Covid-19 have a lower correlation variable below market turbulence showing no validity. Other the other hand, market turbulence, SME performance and firm innovativeness have higher correlation by themselves than the variables below them. This shows market turbulence; SME performance and firm innovativeness are all valid. This is demonstrated in table 4.4

Table 4.4 Correlation matrix

Variable	COV-19	MAKT TUB	SME PER	FRM INNOV
COV-19 PAND	1			
MAKT TUB	.683	1		
SME PER	-.299	-.004	1	
FRM INNOV	.219	.468	.173	1

Source: Field survey 2023

4.5 Multi-collinearity results

Multi-collinearity occurs when two or more predictor variables in a model are correlated, and as a result, provide redundant information about the response variable. According to Hair et al. (1998), an increase in multi-collinearity makes it difficult to estimate the effect of any single variable producing biased estimates of coefficients for regressors; because the variables have more interrelationship. The researcher performed a multi-collinearity test on both Tolerance and Variance Inflation Factor (VIF). According to Pallant (2010), Field (2009), and Tabachnick and Fidell (2007), there are two popular ways to identify multi-collinearity: first, by looking at the matrix of multivariate and bivariate correlation; and second, by determining the effect of variance inflation factors (VIF) and tolerance. According to Pallant (2010), the tolerance effect measures the proportion of the specified independent variable's variability that cannot be determined by the remaining distinct variables in the framework, whereas the VIF measures the opposite of the tolerance effect. Multi-collinearity is evident when the VIF is higher and the tolerance is smaller (0.1) (Pallant, 2010). From (Table 4.5), the collinearity statistics for Tolerance for both covid-19 pandemic, market turbulence and firm innovativeness are all greater than 0.2 which is the threshold. Similarly, the Variance Inflation Factor (VIF) for

covid19 pandemic, market turbulence and firm innovativeness are all less than 5. This obviously signposts that multi-collinearity does not exist in this study.

Table 4.5 Multi-collinearity results

	Collinearity Statistics	
	Tolerance	VIF
Model		
	.521	1.920
Covid-10 Pandemic	.427	2.341
Market Turbulence		
Firm Innovativeness	.762	1.312

Dependent Variable: SME Performance

4.6 Descriptive statistics

Tables 4.6 portrays the descriptive statistics results of the study. The author used SPSS version 24 to perform the descriptive statistics for the variables. According to Table 4.6, the study used valid responses from 375 participants. As indicated earlier, the study used a seven-point Likert scale ranging from 1-7 ratings for collecting the data. According to Table 4.6, all the variables recorded a minimum of one (1) and a maximum of seven (7). From table 4.6 covid-19 had a mean score of 5.149, standard deviation of .425 with minimum value of 1 and maximum value of 7. Again, market turbulence had a mean score of 5.341, standard deviation .583 of whiles

minimum value of 1 and maximum value of 7. Also, SME performance had a mean of 5.692, standard deviation of .593 as well as minimum value of 1 and maximum value of 7. Finally, firm innovativeness had a mean score of 5.512 with standard deviation of .663 with minimum value of 1 and maximum value of 7. This is showed in table 4.6

Table 4.6 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
COV-19	375	5.149	.425	1	7
MAKT TUB	375	5.341	.583	1	7
SME PER	375	5.692	.593	1	7
FRM INNOV	375	5.512	.663	1	7

Source: Field survey 2023

4.7 Regression analysis and hypothesis testing

In order to test the study's main hypothesis, a linear regression and correlation analysis was conducted. The results of the direct hypothesis are presented in the tables below.

4.7.1 Analysis of the relationship between Covid-19 and market turbulence

The researcher tested the strength, connection and the relationship between covid-19 on market turbulence using regression. The researcher used covid-19 as an independent variable with market turbulence and the dependent variable.

Table 4.7 indicate the direction and the connection among covid-19 pandemic and market turbulence. In table 4.7, it was determined that 46.6% vicissitudes ($R^2 = 0.466$) is anticipated in market turbulence due to covid-19 pandemic. The correlation coefficient ($\beta = 0.683$, $F=325.803$ and $p < 0.001$) shows that there is a significant and a strong positive relationship between covid-19 and market turbulence. Thus, a unit change in covid-19 pandemic will

automatically cause 0.683 units change in market turbulence. The statistical value ($t=18.050$) is greater than 2. Consequently, the affirmation that there is a connection between covid-19 and market turbulence is supported. In simple terms, covid-19 impacts on market turbulence. Hence, H_5 is supported

4.7.2 Analysis of the relationship between Covid-19 and SME performance

The study also used the correlation and regression analysis to assess the impact of Covid-19 pandemic on SME's performance. The researcher used SME's performance as a dependent variable with covid-19 pandemic as an independent variable.

Table 4.7 indicate the direction and the connection among covid-19 pandemic and SMEs performance. In table 4.9, it was determined that 9% vicissitudes ($R^2 = 0.090$) is anticipated in SMEs performance due to covid-19 pandemic. The correlation coefficient ($\beta = 0.299$, $F=36.744$ and $p < 0.001$) shows that there is a significant and a strong negative relationship between covid-19 and SMEs performance. Thus, a unit change in covid-19 pandemic will automatically cause 0.299 units change in SMEs performance. The statistical value ($t=22.006$) is greater than 2. Therefore, this affirmation that there is a connection between covid-19 and SMEs performance is supported. In simple terms, covid-19 impacts on market turbulence. Hence, H_6 is supported

Table 4.7 Regression analysis

Variables	Market turbulence	SMEs performance
	Model 1	Model 2
	Beta (t-value)	Beta (t-value)
(Constant)		
<i>Covid-19</i>	.683(18.050)	.299(22.006)
Model Indices		
R	.683	.299
R Square	.466	.090
Adjusted R Square	.465	.087
ΔF	325.803	36.744
Sig.	.000	.000

Source: Field survey, (2023)

4.7.3 The moderating effect of firm innovativeness on the relationship between covid-19, and SMEs performance

The third aim of the research was to evaluate the moderating role of firm innovativeness on the relationship between covid-19, and SMEs performance. Table 4.9 below presents the result of the moderation effect of firm innovativeness on the affiliation between Covid-19 and SMEs performance. The outcome signpost that the interactive effect of firm innovativeness and covid19 is statistically positive to SMEs performance (Covid-19 x Firm innovativeness, $\beta =$

1.368, $t = 3.076$, $p < 0.05$). This endorse that firm innovativeness moderates the connection among covid-19 and SMEs performance. Hence *H3* is supported. This indicates that the interaction between covid-19 and firm innovativeness is higher SMEs performance.

4.7.4 The moderating effect of firm innovativeness on the relationship between covid-19, and market turbulence

Table 4.9 final aim of the research was to evaluate the moderating role of firm innovativeness on the relationship between covid-19, and market turbulence. Table 4.9 demonstrates that, there is a moderation effect of firm innovativeness on the linkage among covid-19 and market turbulence. The scores signpost that the interactive effect of firm innovativeness and covid-19 is statistically positive to market turbulence (Covid-19 x Firm innovativeness, $\beta = .062$, $t = 9.053$, $p < 0.05$). The outcome endorses that firm innovativeness moderates the connection among covid-19 and market turbulence. Hence *H4* is supported. This signifies that the interaction between covid-19 and firm innovativeness is higher market turbulence.

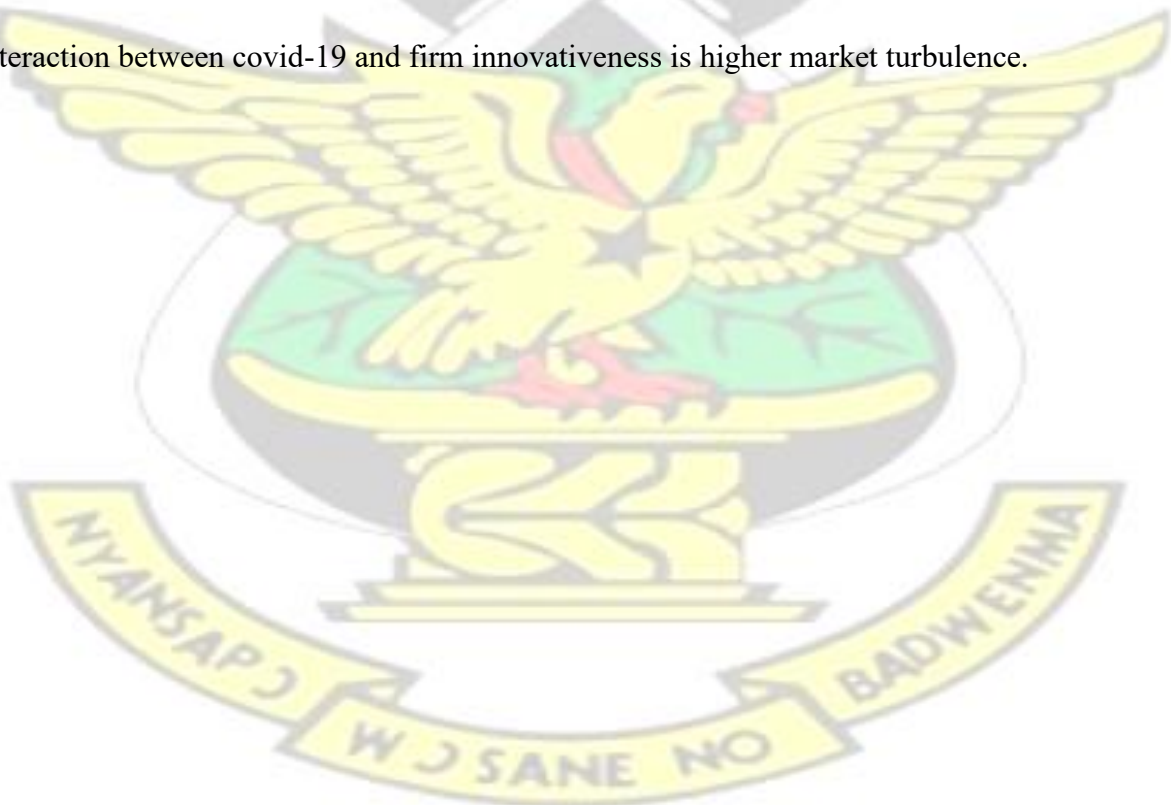


Table 4.8 Moderation analysis

Variables	SMEs performance	Market turbulence
	Model 1	Model 2
	Beta (t-value)	Beta (t-value)
(Constant)		
<i>Main effect</i>		
Covid-19 pandemic	1.368(3.076)	.062 (9.053)
<i>Moderator variable</i>		
Firm innovativeness	1.245 (1.905)	.984 (84.213)
<i>Interactive effect</i>		
Covid-19 x Firm innovativeness	1.985(2.294)	1.665 (126.244)
Model Indicators		
R	.401	.995
R Square	.161	.990
Adjusted R Square	.154	.990
ΔF	23.736	12600.636
Sig.	.000	.000

Source: Field survey, (2023)

4.8 Discussion of findings

The study involved a comprehensive review of the relevant literature related to the research topic, with a particular focus on aligning it with the research objectives. The researcher critically examined the research findings to establish whether they were consistent with the existing literature. This is outline below

4.8.1 The relationship between Covid-19 and Market Turbulence

There is a direction and the connection among covid-19 pandemic and market turbulence. In table 4.9, it was determined that 46.6% vicissitudes ($R^2 = 0.466$) is anticipated in market turbulence due to covid-19 pandemic. The correlation coefficient ($\beta = 0.683$, $F=325.803$ and $p < 0.001$) shows that there is a significant and a strong positive relationship between covid-19 and market turbulence. Thus, a unit change in covid-19 pandemic will automatically cause 0.683 units change in market turbulence. The statistical value ($t=18.050$) is greater than 2. Consequently, the affirmation that there is a connection between covid-19 and market turbulence is supported.

This is affirming the literature stating that the COVID-19 crisis unfolds global from February 21 to March 24, 2020, and the variety of instances is still increasing unexpectedly each day. The outbreak of COVID-19 is predicted to have main implications for the worldwide market situation (word economic, 2020). Due to the worldwide outbreak of COVID-19, the worldwide intake pattern is probable to be affected between twenty to three percent and four to eight percent (ADB, 2020). Further, it has also been predicted that the modern pandemic might also cause a 5-15% reduction in global FDI. Furthermore, consistent with the UNCTAD document, the arena wishes an aid bundle of up to 2. Five trillion dollars to deal with the damage (UNCTAD, 2020).

4.8.2 Analysis of the relationship between Covid-19 and SME performance

There is a direction and the connection among covid-19 pandemic and SMEs performance. In table 4.10, it was determined that 9% vicissitudes ($R^2 = 0.090$) is anticipated in SMEs performance due to covid-19 pandemic. The correlation coefficient ($\beta = 0.299$, $F=36.744$ and $p < 0.001$) shows that there is a significant and a strong negative relationship between covid19 and SMEs performance. Thus, a unit change in covid-19 pandemic will automatically cause 0.299 units change in SMEs performance. The statistical value ($t=22.006$) is greater than 2. Therefore, this affirmation that there is a connection between covid-19 and SMEs performance is supported.

This confirm the literature stating that Small and medium-sized enterprises, together with their personnel, are a necessary a part of the social and financial structures of regular lifestyles global. This vital function played via Small and medium-size enterprise is now facing threats from the incomparable results of the coronavirus. Clients, as well as intermediaries of Small and medium-size enterprise are exposed to the chance of commercial enterprise failure because of the recession that has handed global (Wuen and Wu, 2020). But, in such situations, controlling the virus, keeping employees' wages, reducing lengthy-term prices and the fees of stopping business collapse are vitally essential, which the government ought to do. Therefore, extreme motion with nicely-described programs and donations are urgently wished for the above purpose (Weiwen, Karen, & Luedi, 2020).

4.8.3 The moderating effect of firm innovativeness on the relationship between covid-19, and SMEs performance

The outcome of the research indicates a moderation effect of firm innovativeness on the affiliation between Covid-19 and SMEs performance. The result signpost that the interactive effect of firm innovativeness and covid-19 is statistically positive to SMEs performance. This

endorse that firm innovativeness moderates the connection among covid-19 and SMEs performance.

The literature confirm that innovation is considered an especially competitive marketplace environment and an element inside the achievement of the global financial system. The progressive perspective of the firm additionally affords facts approximately the future market position (Rajapathirana and Hui, 2018). Progressive functionality is taken into consideration a precious asset for businesses to preserve aggressive advantage and to enforce average approach (Lawson and Samson, 2001). A firm's capability to invent makes it less complicated for companies to speedily deliver new merchandise to marketplace and undertake novel techniques. This is similarly taken into consideration a vital component to sell ongoing competition and covid era. As firm continue to innovate, they can stand against pandemics so as to perform. Firms that were innovating was able to stand on the covid-19 pandemic for sustenance then to generate profit.

4.9.4 The moderating effect of firm innovativeness on the relationship between covid-19, and market turbulence.

The conclusion was that, there is a moderation effect of firm innovativeness on the linkage among covid-19 and market turbulence. The scores signpost that the interactive effect of firm innovativeness and covid-19 is statistically positive to market turbulence. The outcome endorses that firm innovativeness moderates the connection among covid-19 and market turbulence.

This is confirmed by the literature that innovating firms can sign their capacity to satisfy present day and future consumer needs, and revolutionary merchandise growth anticipated software and consumer pleasure within the technology of COVID-19. Expanded expected software associated with innovation has a positive effect on converting consumer attitudes. However,

greater product or service innovation can definitely affect SMEs to fulfil consumer demand in instances of turbulence. Customers may be beaten and discouraged by way of the complexity of latest products or services, which may be too worrying for them (Calantone et al., 2006). The dearth of records approximately new products and the greater number and kind of revolutionary merchandise presented can cause a boom in patron uncertainty approximately the company's capability to meet their desires and a lower in client delight (stock, 2011).

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.0 Introduction

The chapter of the research deals with the summary of the finding upon which conclusion and recommendation was being made. The researcher seeks to assess the effect of Covid 19 pandemic on market turbulence and performance of SMEs. The moderating role of firm innovativeness. a case study of Kasoa Municipality.

5.1 Summary of findings

The purpose of the research under study was to examine the relationship between Covid-19 on market turbulence. To assess the impact of Covid-19 pandemic on SME's performance. To evaluate the moderating role of firm innovativeness on the relationship between covid-19, and SMEs performance and to evaluate the moderating role of firm innovativeness on the relationship between covid-19, and market turbulence.

5.1.1 Relationship between Covid-19 and Market Turbulence

The purpose of the research was to examine the relationship between Covid-19 on market turbulence. An enquiry made from respondents revealed that there is a direction and the connection among covid-19 pandemic and market turbulence. It is determined that market turbulence had an influence to covid-19 pandemic. The correlation coefficient shows that there is a significant and a strong positive relationship between covid-19 and market turbulence. Thus, a unit change in covid-19 pandemic will automatically cause a unit's change in market turbulence.

5.1.2 Relationship between Covid-19 and SMEs Performance

The research aid to assess the impact of Covid-19 pandemic on SME's performance. There is a direction and the connection among covid-19 pandemic and SMEs performance. In table 4.8, it was determined that covid-19 pandemic have an influence on SMEs performance. The correlation coefficient shows that there is a significant and a strong negative relationship between covid-19 and SMEs performance. Thus, a unit change in covid-19 pandemic will automatically cause change in SMEs performance.

5.1.3 The moderating effect of Firm Innovativeness on the relationship between Covid19 and SMEs performance.

The objective of the research was to evaluate the moderating role of firm innovativeness on the relationship between covid-19, and SMEs performance. The outcome indicates a moderation effect of firm innovativeness on the affiliation between Covid-19 and SMEs performance. The result signpost that the interactive effect of firm innovativeness and covid-19 is statistically positive to SMEs performance. This endorse that firm innovativeness moderates the connection among covid-19 and SMEs performance.

5.1.4 The moderating effect of Firm Innovativeness on the relationship between Covid19 and market turbulence.

The intentions of the researcher were to evaluate the moderating role of firm innovativeness on the relationship between covid-19, and market turbulence. The results indicate that firm innovativeness and the interaction term of Covid-19 and market turbulence are significant.

There is a moderation effect of firm innovativeness on the linkage among covid-19 and market turbulence. The scores signpost that the interactive effect of firm innovativeness and covid-19 is statistically positive to market turbulence. The outcome endorses that firm innovativeness moderates the connection among covid-19 and market turbulence.

5.2 Conclusion

The emergence of the covid-19 pandemic has caused several negative effects to the society, the environment and businesses world at large. The research aimed to examine the relationship between Covid-19 on market turbulence, assess the impact of Covid-19 pandemic on SME's performance, evaluate the moderating role of firm innovativeness on the relationship between covid-19, and SMEs performance and evaluate the moderating role of firm innovativeness on the relationship between covid-19, and market turbulence. The research was carried out with the used of explanatory research design, quantitative analysis, primary data and convenient sampling technique being a non-probability sapling system. The research showed a positive impact among covid-19 and market turbulence. Also, a positive relationship between covid-19 and SMEs performance. The study gave a moderation effect of firm innovativeness on the affiliation between Covid-19 and SMEs performance and a moderation effect of firm innovativeness on the linkage among covid-19 and market turbulence

Although small and medium size enterprises face several or numerous market turbulences, the covid-19 pandemic install much turbulences into the business world. small and medium size enterprises play an integral role in the development of a nation, they are most neglected. Small and medium size enterprises play roles like offering employment to the society, aid in the development of national gross domestic product and also help in production to stabilise a countries currency exchange rate. They lack finance and other resources to perform them.

The research has proven that covid-19 pandemic has a negative effect of small and medium size enterprises performance. The pandemic also has positive effect on market turbulence which the business world encounter. But firms being innovative will be able to stand against the turbulence covid-19 could cause. Therefore, small and medium size enterprises in Ghana must be innovative in terms of service provision and technology so as to stand against any turbulence that could arise in the near future.

5.3 Recommendation

The researcher upon analysis of results came out with the following commendation to small and medium size enterprises, policy makers and academic. Turbulences are unforeseeable circumstances. Small and medium size enterprises must always plan for turbulences because they can offer without informing them.

Again, small and medium size enterprises must have a strategic plan both short term, medium term as well as long term ad so to be strategic on any turbulences that may arise. Firms within the SMEs level must also research to be innovative to meet customers demand in the changing market. For SMEs to performance and stand against any competition, they must be innovative in nature. The innovation could be brand modification, packaging fluctuations for the current market, alteration of product test and preference as well as the usage of information communication technology to reaching customers. The world is now driving to digitalisation

level, therefore small and medium size enterprises should plan and go into digitalisation so as to expand their market base.

Small and medium size enterprises could perform through going innovative ideas. Without being innovative, standing against competitors will be an obstacle. Therefore, firms within the SMEs level must inculcate the system of innovation into their business practices so as to perform in the business environment.

REFERENCE

Abideen, S. O. (2020). Coronavirus (COVID-19) and the Survival of Small and Medium Enterprises in Abeokuta, Ogun State Nigeria Scholars. *Journal of Economics, Business and Management*, 07(06), 209-214.

ADB (2020). *Asian development outlook: What drives innovation in Asia? Special topic: The impact of the coronavirus outbreak—An update*. Manila, Philippines: Asian Development Bank.

Agyabeng-Mensah, Y. & Tang, L. (2021), The relationship among green human capital, green logistics practices, green competitiveness, social performance and financial performance, *Journal of Manufacturing Technology Management*.

Al Mamun, A., & Fazal, S.A. (2018). Effect of entrepreneurial orientation on competency and microenterprise performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(3), 379-398.

Ansell, C., & Boin, A. (2019). Taming Deep Uncertainty: The Potential of Pragmatist Principles for Understanding and Improving Strategic Crisis Management. *Administration & Society*, 51(7), 1079–1112. <https://doi.org/10.1177/0095399717747655>

Arokiasamy, A. R. A., Nguyen, K-L, Nguyen, H. T. N. (2021). The impact of knowledge management on firm innovativeness via mediating role of innovative culture – The case of MNEs in Malaysia. *Interdisciplinary Journal of Information, Knowledge, and Management*, 16, 435-457

Auh, S., & Menguc, B. (2005). Creating a firm-level dynamic capability through capitalizing on market orientation and innovativeness. *Journal of the Academy of Marketing Science*, 34(1), 63-73.

Ayimey, E.K., Blomme, R.J., Kil, A., & Honyenuga, B.Q. (2020). Insight into How Market Orientation Impacts Marketing Performance in the Hotel Industry of Ghana. Chen, J.S. (Ed.) *Advances in Hospitality and Leisure (Advances in Hospitality and Leisure*, 16, 115-140.

Clark, C., Davila, A., Regis, M., & Kraus, S. (2020). Predictors of COVID-19 voluntary compliance behaviours: An international investigation. *Global Transitions*, 2, 76–82.
<https://doi.org/10.1016/j.glt.2020.06.003>

Chen, H.; Guo, J.; Wang, C.; Luo, F.; Yu, X.; Zhang, W.; Li, J.; Zhao, D.; Xu, D.; Gong, Q. (2021) Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: A retrospective review of medical records. *Lancet*, 395, 809–815.

Chittithaworn, C., Islam, M. A., Keawchana, T., & Yusuf, D. H. M. (2011). Factors affecting business success of small & medium enterprises (SMEs) in Thailand. *Asian social science*, 7(5), 180-190.

Craven, M., Liu, L., Mysore, M., & Wilson, M. (2020). *COVID-19: Implications for business*. McKinsey & Company.

Disoska, E. M., Tevdovski, D., Toshevska-Trpchevska, K., & Stojkoski, V. (2020). Evidence of innovation performance in the period of economic recovery in Europe. *Innovation: The European Journal of Social Science Research*, 33(3), 280–295.
<https://doi.org/10.1080/13511610.2018.1524288>

Dwivedi Y.K., Hughes D.L., Coombs C., Constantiou I., Duan Y., Edwards J.S. (2020) Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life. *International Journal of Information Management*. 55

Frank T. (2020). Coronavirus: China Grants Banks Extra Funding to Spur Loans to Hard-Hit Small Businesses, South China Morning Post, February 26, 2020.

Cadogan, J. W., Kuivalainen, O., Sundqvist, S. and Sunqvist, S. (2009). Export MarketOriented Behaviour and Export Performance: Quadratic and Moderating Effects under Differing Degrees of Market Dynamism and Internationalization. *Journal of International Marketing*, Vol: 17, No: 4, 71-89.

Galeazzo, A. (2019). Degree of leanness and lean maturity: exploring the effects on financial performance. *Total Quality Management & Business Excellence*, 32(7-8), 758-776.

García, C. G., Meana-Llorián, D., G-Bustelo, B. C. P., Lovelle, J. M. C., & GarciaFernandez, N. (2017). Midgar: Detection of people through computer vision in the Internet of Things scenarios to improve the security in Smart Cities, Smart Towns, and Smart Homes. *Future Generation Computer Systems*, 76(1), 301-313.

Ghobakhloo, M., & Azar, A. (2018). Business excellence via advanced manufacturing technology and lean-agile manufacturing. *Journal of Manufacturing Technology Management*, 29(1), 2-24.

Gusti Ayu Ketut Giantaria, Ni Nyoman Kerti Yasaa*, Herkulanus Bambang Suprasto and Putu Laksmi Dewi Rahmayantib (2022). The role of digital marketing in mediating the effect of

the COVID-19 pandemic and the intensity of competition on business performance. *International Journal of Data and Network Science*

Gunday, G., Ulusoy, G., Kılıç, K. and Alpkın, L. (2020). Effects of innovation types on firm performance. *Int. J. Production Economics*, 133, 662–676.

Gupta, A. (2020). Research & Development and Firm Resilience During Bad Times. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3703103>

Hamilton, J. (2020). The Strategic Change Matrix and Business Sustainability across COVID-19. *Sustainability*, 12(15), 6026. <https://doi.org/10.3390/su12156026>

Harapan, H., Itoh, N., Yufika, A., Winardi, W., Keam, S., Te, H., Mudatsir, M. (2020). Coronavirus disease 2019 (COVID-19): A literature review. *Journal of Infection and Public Health*, 13(2020), 667-673.

Horchani Samah Chemli & Zouaoui Mahmoud (2021). "Environment Turbulence Effect on The Dynamics of Intellectual Capital Accumulation and Ambidextrous Innovation," *International Journal of Innovation Management*, World Scientific Publishing Co. Pte. Ltd., vol. 25(05), 1-36.

Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., Zhang, L., Fan, G., Xu, J., Gu, X., Cheng, Z., Yu, T., Xia, J., Wei, Y., Wu, W., Xie, X., Yin, W., Li, H., Liu, M., ..., Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, 395(10223), 497–506.

Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness, Its Antecedents and Impact on Business Performance. *Industrial Marketing Management*, 33(5), 429–438

Kyazze, L.M., Nsereko, I., & Nkote, I. (2020), Cooperative practices and non-financial performance of savings and credit cooperative societies, *International Journal of Ethics and Systems*, 36(3), 411-425.

Jebreen Issam Serl (2012) Using inductive approach as research strategy in requirement engineering. *International journal of computer and information technology*. www.ijcit.com

Laforet, S. (2011). A framework of organizational innovation and outcomes in SMEs. *International Journal of Entrepreneurial Behavior & Research*, 17(4), 380–408. <http://doi.org/10.1108/13552551111139638>

Lawson, B., & Samson, D. (2001). Developing innovation capability in organizations: A dynamic capabilities approach. *International Journal of Innovation Management*, 5(3), 377–400. <https://doi.org/10.1142/S1363919601000427>

Lazarevic-Moravcevic, M. (2019). "Characteristics of Marketing Communication Strategy of a Small Enterprise". *Economic Analysis*, 52(2), 104-112.

- Luftman, J., Lyytinen, K., & Zvi, T. b. (2017). Enhancing the measurement of information technology (IT) business alignment and its influence on company performance. *Journal of Information Technology*, 32(1), 26-46.
- Matt, C., Linda L., and Matt W. (2020). COVID-19: Implications for Business, McKinsey & Company, March 2020.
- Michail N.A., Melas K.D. (2020) Shipping markets in turmoil: an analysis of the COVID-19 outbreak and its implications. *Transport. Res. Interdisciplinary Perspect.* 7:1–9. 100178
- Moore, N. (2020). Chloroquine for COVID-19 infection: Springer.
- Moustafa Elazhary, Aleš Popovič, Paulo Henrique de Souza Bermejo & Tiago Oliveira (2022): How Information Technology Governance Influences Organizational Agility: The Role of Market Turbulence, *Information Systems Management*,
- Nagwan AlQershia (2021) Strategic thinking, strategic planning, strategic innovation and the performance of SMEs: The mediating role of human capital. *Management Science Letters*
- Nawal Abdalla Adam and Ghadah Abdulrahman Alarifi (2020) Innovation Practices for Enhancing Small and Medium-Sized Enterprises (SMEs) Performance and Survival during Coronavirus (COVID-19) Epidemic Crisis: The Moderating Role of External Support. *Research square*
- Negrao, L.L.L., Lopes de Sousa Jabbour, A.B., Latan, H., Godinho Filho, M., Chiappetta Jabbour, C.J. & Ganga, G.M.D. (2019). Lean manufacturing and business performance: testing the S-curve theory. *Production Planning and Control*, 31 (10), 771-785.
- Ohia, C., Bakarey, A. S., & Ahmad, T. (2020). COVID-19 and Nigeria: putting the realities in context. *International Journal of Infectious Diseases*, 279-281
- Ozili, P. K., & Arun, T. (2020). Spillover of COVID-19: Impact on the Global Economy. Accessed at SSRN 3562570.
- Radwan, B. Q. (2021). The Impact of Customer Success Factors on the Financial Performance of International Computer Technology Companies in Dubai. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(11), 6401-6415.
- Rajapathirana, R. P. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3(1), 44-55
- Sen, F. K. and Egelhoff, W. G. (2000). Innovative capabilities of a firm and the Use of Technical Alliances. *IEEE Transactions on Engineering Management*, 47(2), 174–183.
- Senbeto D. L., Hon A. H. Y. (2020). Market turbulence and service innovation in hospitality: Examining the underlying mechanisms of employee and organizational resilience. *Service Industries Journal*, 40(15–16), 1119–1139.

Shereen, M. A., Khan, S., Kazmi, A., Bashir, N., & Siddique, R. (2020). COVID-19 infection: Origin, transmission, and characteristics of human coronaviruses. *Journal of Advanced Research*, 24(2020), 91-98

Sonia, S. (2016) *Pandemic: Tracking Contagions, From Cholera to Ebola and Beyond*; Sarah Crichton Books: New York, NY, USA, 2016; ISBN 978-0-374-12288-1.

Stock, R. M. (2011). How Does Product Program Innovativeness Affect Customer Satisfaction? A Comparison of Goods and Services. *Journal of the Academy of Marketing Science*, 39(6), 813–827

Suander M., Lewis P. and Thorhil A (2007) *Research methods for business students*, 4th ed. Harlow, Peason Education.

Suander M., Lewis P. and Thorhil A (2009) *Research methods for business students*, 5th ed. Harlow, Peason Education.

Thornhill, S. (2006). Knowledge, innovation and firm performance in high- and lowtechnology regimes. *Journal of Business Venturing*, 21, 687–703.

Tsai, K.-H., & Yang, S.-Y. (2013). Firm innovativeness and business performance: The joint moderating effects of market turbulence and competition. *Industrial Marketing Management*, 42(8), 1279-1294.

UNCTAD (2020a). *The Covid-19 shock to developing countries: Towards a “whatever it takes” programme for the two-thirds of the world’s population being left behind*. United Nations Conference on Trade and Development.

Unhale, S. S., Ansar, Q. B., Sanap, S., Thakhre, S., Wadatkar, S., Bairagi, R., Biyani, K. (2020). A review on coronavirus (COVID-19). *World Journal of Pharmaceutical and Life Sciences*, 6(4), 109-115.

Wang, H., Begley, T., Hui, C., & Lee, C. (2015). Are the effects of conscientiousness on contextual and innovative performance context specific? Organizational culture as a moderator. *The International Journal of Human Resource Management*, 23(1), 174-189.

Weiwen Han Karen Harris Thomas Luedi. (2020). "How much will coronavirus hurt China's economy?", Bain & Company, Snap Chart,

WHO. (2020). *Timeline of WHO’s response to COVID-19*. World Health Organization. Retrieved from www.who.int. on 30th August 2022.

Word Economic (2020). World economic prospects monthly. *Economic Outlook*, 44(S2), 1–33.

Wuen H. L. and Wu J. F. (2020). 'Research Report on Companies' Survival and Development Strategy During a Noval Coronavirus Epidemic, Beijing: UIBE Press, February 2020.

Yıldız, S., Baştürk, F., & Boz, İ. T. (2014). The effect of leadership and innovativeness on business performance. *Procedia-Social and Behavioural Sciences*, 150, 785-793.

Zehir Cemal and Dilek Balak (2018) Market Dynamism and Firm Performance Relation: The Mediating Effects of Positive Environment Conditions and Firm Innovativeness. *Emerging marketing journal*

KNUST

APPENDIX 1

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

KNUST SCHOOL OF BUSINESS, KUMASI

SURVEY ON EFFECT OF COVID 19 PANDEMIC ON MARKET TURBULENCE

AND PERFORMANCE OF SMES. THE MODERATING ROLE OF FIRM

INNOVATIVENESS.

This is being carried out to discover the effect of covid 19 pandemic on market turbulence and the performance of SMEs. The moderating role of firm innovativeness. I would be pleased if you could take some time to complete this questionnaire.

Information provided for this study as a result of you completing this questionnaire will be used for academic purposes only. I pledge to keep information very confidential and not to release it to any other person(s). Please tick (✓) the correct answer in the appropriate boxes and specify where necessary.

SECTION A-Demographic of Respondents

1. Sex

☐ Male

☐ Female

2. Age

☐ Less than 20years

☐ 20 – 29 years.

☐ 30 – 39years

☐ 40years and above

3. Education background

☐ HND

☐ Masters

☐ Degree

☐ PhD

4 Position

☐ Branch Manager

☐ Founder

☐ Shop attendants

☐ Sales executive

5. Number of years with firm

☐ 1-3year

☐ 4-7years

☐ 8-11 years

☐ Above 12years

SECTION B- COVID-19 PANDEMIC

Please indicate to what extent you agree/disagree with each statement as the statement relates to covid-19 pandemic

1 = Strongly Disagree

4 = Neutral

7 = Strongly Agree

	1	2	3	4	5	6	7
The covid-19 pandemic has resulted in limited business continuity planning							
The covid-19 pandemic causes business capacity to decline							
The covid-19 pandemic has resulted in limited businesses in serving customers							
The covid-19 pandemic has caused businesses to experience difficulty in supplying or raw materials							
The covid-19 pandemic causes purchasing power of customers to decline							
The firm losses customers due to the pandemic							

The firm has nearly collapsed during the peak of the Covid 19 pandemic							
The firm experiences shrinkage of customers demand							
The firm has recorded low customer visits							
Our markets nearly fold up							
Covid 19 affected our service flexibility							
Covid 19 has affected cost of production							

SECTION C- MARKET TURBULENCE

Please indicate to what extent you agree/disagree with each statement as the statement relates to market turbulence

1 = Strongly Disagree

4 = Neutral

7 = Strongly Agree

	1	2	3	4	5	6	7
In our kind of business, customers' product preferences change quite a bit over time							
Our customers tend to look for new product and services at all time							
We are witnessing demand for our products and services from customers who never bought them before							
New customers tend to have product-related needs that are different from those of our existing customers.							
We cater to many of the same customers that we used to in the past.							
Sometimes, our customers are very price sensitive, but on other occasions, price is relatively unimportant							

SECTION D- SME's PERFORMANCE

Please indicate to what extent you agree/disagree with each statement as the statement relates to SME's performance

1 = Strongly Disagree

4 = Neutral

7 = Strongly Agree

	1	2	3	4	5	6	7
Our business had improvement on return on investment							
Our firm experienced increase in market share							
There was a growth in profitability during the covid-19 era							
The firm had research and development for new product during covi-19 period							
Our firm experienced an increase in business transaction during covid-19 period							
The firm sales volume increase in the covid-19 era							

SECTION E- FIRM INNOVATIVENESS

Please indicate to what extent you agree/disagree with each statement as the statement relates to firm innovativeness

1 = Strongly Disagree

4 = Neutral

7 = Strongly Agree

	1	2	3	4	5	6	7
Our organization frequently tries out new ideas							
Our organization seeks out new ways to do things							
Our organization is creative in its methods of operation							
Our organization is often the first to market with new products and services							
Our new product introduction has increased over the last 5years							

THANK YOU